TRANSCRIPT OF RECORD.

SUPREME COURT OF THE UNITED STATES.

OCTOBER TERM, 1891.

No. 130.

THE WASHBURN AND MOEN MANUFACTURING COMPANY AND ISAAC L. ELLWOOD, APPELLANTS,

vs.

JOHN D. WILER AND D. WILER.

APPEAL FROM THE CIRCUIT COURT OF THE UNITED STATES FOR THE NORTHERN DISTRICT OF IOWA.

FILED SEPTEMBER 28, 1888.

SUPREME COURT OF THE UNITED STATES.

OCTOBER TERM, 1891.

No. 130.

THE WASHBURN AND MOEN MANUFACTURING COMPANY AND ISAAC L. ELLWOOD, APPELLANTS,

vs.

JOHN D. WILER AND D. WILER.

APPEAL FROM THE CIRCUIT COURT OF THE UNITED STATES FOR THE NORTHERN DISTRICT OF IOWA.

INDEX.

	Original.	Print.
Caption	1	1
Bill of complaint	2	1
Exhibit A—Letters patent No. 157,124, granted Joseph F. Glidden November 24, 1874	15	6
Appearance for defendants	17	8
Subpœna	19	8
Marshal's return	19½	9
Answer	20	10
Replication	30	14
Order consolidating this cause with No. 119	32	15
Decree	33	15
Petition for allowance of appeal	33	15
Order allowing appeal	35	16
Supersedeas bond	35	16
Citation (copy)	39	18
Citation (original)	42	19
Notices to take testimony for complainants	44	20
Evidence for complainants	46	20
Exhibits offered	47	21

JUDD & DETWEILER, PRINTERS, WASHINGTON, D. C., JUNE 30, 1891.

	Original.	Print.
Testimony of David J. Powers	49	21
Clarence B. E. Hoyt	65	27
Jerome W. Millington	70	29
"Exhibit Glidden November, 1874, Patent"—Letters Patent No. 157,124, granted Joseph F. Glidden Nov. 24, 1874	76	31
Clerk's certificate	79	33

1 THE UNITED STATES OF AMERICA, } ss:
Northern District of Iowa, }

Pleas before the circuit court of the United States in and for the northern district of Iowa, eastern division, at a term begun and holden at Dubuque, in said district, on the — Tuesday of ——, A. D. 188–, before the Honorable Oliver P. Shiras, judge of said court.

WASHBURN AND MOEN MANUFACTURING COMPANY and ISAAC L. ELLWOOD
vs.
JOHN D. WILER and D. WILER. } In Equity.

Be it remembered that heretofore, to wit, on the 12th day of March, A. D. 1887, there was filed in the office of the clerk of the circuit court of the United States in and for the northern district of Iowa, eastern division, a bill of complaint; which bill of complaint is in the words and figures following, to wit:

2 Circuit Court of the United States within and for the Northern District of Iowa, Eastern Division.

WASHBURN & MOEN MANUFACTURING COMPANY and ISAAC L. ELLWOOD
vs.
JOHN D. WILER and D. WILER. } In Equity.

To the honorable the judges of the circuit court of the United States within and for the northern district of Iowa:

1.

Washburn & Moen Manufacturing Company, a corporation duly established under and by virtue of the laws of the State of Massachusetts and having a place of and doing business in the city and county of Worcester, in said State, and a citizen of said State, and Isaac L. Ellwood, of De Kalb, in the county of De Kalb and State of Illinois, and a citizen of said State of Illinois, bring this their bill of complaint against John D. Wiler and D. Wiler, partners in business under the firm name and style of Wiler Brothers, of Cedar Falls, in the State of Iowa, and citizens of said State of Iowa.

2.

3 And thereupon your orators complain and say that they are informed and believe that one Joseph F. Gidden was and is the first and original inventor of certain new and useful improvements in wire fences described in the letters patent next hereinafter mentioned, and which had not been known or used before his said invention and which had not been at the time of his application for a patent therefor, as next hereinafter mentioned, in public use or on sale for more than two years prior to his said application.

3.

And your orators further show unto your honors that said Joseph F. Glidden, being so as aforesaid the original and first inventor and discoverer of said improvement in wire fences and being also a citizen of the United States, did, on the twenty-fourth day of November, A. D. 1874, upon due application therefore, obtain letters patent of the United States for said invention, in due form of law, under the seal of the Patent Office of the United States, signed by the acting Secretary of the Interior and countersigned by the acting Commissioner of Patents of the United States, bearing
4 date the day and year last aforesaid and marked No. 157,124, whereby there was granted and secured to said Joseph F. Glidden, his heirs, administrators, and assigns, for the term of seventeen years from and after the date of said letters patent No. 157,124, the full and exclusive right and liberty of making, constructing, using, and vending to others to be used the said invention and improvement described in said letters patent, as by said letters patent or a duly authenticated copy thereof, here in court to be produced, will more fully and at large appear.

4.

And your orators further show unto your honors that on or about the twenty-seventh day of January, A. D. 1875, the said Joseph F. Glidden, by an assignment in writing of that date, sold, assigned, and transferred unto said Isaac L. Ellwood one undivided half of all his right in said letters patent No. 157,124, which assignment was duly recorded in the Patent Office of the United States, as by said assignment or a duly authenticated copy thereof and the
5 certificate of such recording thereto affixed, ready in court to be produced, will more fully and at large appear.

5.

And your orators further show unto your honors that on or about the eighth day of May, A. D. 1876, the said Joseph F. Glidden, by an assignment in writing of that date, sold, assigned, and transferred unto said Washburn & Moen Manufacturing Company one undivided half part, share, and interest in and to said letters patent No. 157,124, which assignment was duly recorded in the Patent Office of the United States, as by said assignment or a duly authenticated copy thereof and the certificate of such recording thereto affixed, ready in court to be produced, will more fully and at large appear.

6.

And your orators further show unto your honors that an office copy of the specifications and drawings of said letters patent No. 157,124 is hereto annexed and marked "Exhibit A."

7.

And your orators further show unto your honors that by
6 virtue of the hereinbefore-cited premises and the aforesaid assignments to them they became and now are the sole and

exclusive owners of said letters patent No. 157,124 and of all the rights and privileges granted and secured or intended to be granted and secured thereby in, for, and throughout the said northern district of Iowa and in, for, and throughout the said State of Iowa and elsewhere in the United States as aforesaid.

8.

And your orators further show unto your honors that since they became the owners of said invention and improvement as aforesaid they have invested and expended large sums of money and have been at great trouble in and about said invention for the purpose of carrying on the business of manufacturing and selling said improvement in wire fences or causing the same to be done and making the same profitable to themselves and useful to the public, and that said invention has been and is of great utility and value and of great benefit and advantage to the public, and that said im-
7 provement in wire fences has been and now is being manufactured and sold or caused to be manufactured and sold by your orators to their great benefit and advantage and to the great benefit and advantage of the public, and that the public have generally acknowledged and acquiesced in the aforesaid rights of your orators under said patent, and that your orators will realize and receive large gains and profits from said invention if infringements of said letters patent by said defendants and their confederates shall be prevented.

9.

And your orators further show unto your honors that notice was given to the said defendants by your orators of the aforesaid rights of your orators under said letters patent and of their infringement of said letters patent No. 157,124, and that the improvement in wire fences which was being sold by the defendants, as hereinbefore mentioned, used and employed in its construction and operation the aforesaid improvement and was an infringement upon said letters patent No. 157,124.

8 10.

Yet the said defendants, well knowing the premises and the rights acquired by and secured to your orators as aforesaid, but contriving to injure your orators, and to deprive them of the benefits and advantages which might and otherwise would accrue to them from said invention as aforesaid, and both before and after said notice to said defendants as aforesaid and before the commencement of this suit, did, at said Cedar Falls and elsewhere in said district and at various other places within the United States, as your orators are informed and believe, without the license or allowance and against the will of your orators and in violation of their aforesaid rights and in infringement of said letters patent No. 157,124, unlawfully and wrongfully and in defiance of the aforesaid rights of your orators, vend to others to be used said invention and improvement patented in and by said letters patent No. 157,124, and did vend to

others to be used, and did cause the same to be done, barbed fence wire made according to and using and employing in its construction and operation said invention and improvement and
9 substantial and material parts thereof and are still continuing so to do, and that the said defendants, as your orators are informed and believe, are threatening to sell the aforesaid barbed fence wire in said district and territory owned by your orators as aforesaid in large amounts and quantities and to supply the market therewith; and that said defendants, as your orators are informed and believe, have a large quantity of said barbed fence wire on hand, made, which they are offering for sale, and ready for sale, and to be sold by them, at such prices and on such terms as they can obtain, in infringement of said letters patent and of the aforesaid exclusive rights and privileges of your orators under the same; and that said actings and doings of the defendants and their confederates are all in defiance of the aforesaid exclusive rights acquired by and secured to your orators as aforesaid and to their great and irreparable loss and injury, and by which they have been deprived and still are being deprived of great gains and profits which they might and otherwise would have obtained, but
10 which have been received and enjoyed and are still being received and enjoyed by the said defendants by and through their aforesaid unlawful acts and doings.

11.

And your orators further show unto your honors on information and belief that the said defendants have sold large amounts and quantities of said barbed fence wire and have large amounts and quantities thereof on hand which they are offering for sale as aforesaid, and have made and realized large profits and advantages therefrom, as your orators are informed and believe, but to what extent and how much exactly your orators do not know and pray a discovery thereof; and your orators say that the use of said invention by the defendants as aforesaid and their preparation for and avowed determination to continue the same and their other aforesaid unlawful acts in disregard and defiance of the rights of your orators as aforesaid have the effect to encourage and induce others to venture to infringe said letters patent in disregard of your orators' aforesaid rights.

12.

And forasmuch as your orators can have no adequate re-
11 lief except in this court, to the end, therefore, that the said defendants may, if they can, show why your orators should not have the relief hereby prayed, and may, upon their corporal oaths, according to their best and utmost knowledge, remembrance, information, and belief, full, true, and direct and perfect answer make to the premises, and to all the several matters hereinbefore stated and charged, as fully and particularly as if severally and separately interrogated as to each and every of said matters, and may be compelled to account for and pay to your orators the gains

and profits by them acquired and ten thousand dollars damages suffered by your orators from the aforesaid unlawful acts of the said defendants.

13.

And your orators pray that the said defendants, John D. Wiler and D. Wiler, their servants, agents, attorneys, and workmen, and each and every of them, may be restrained and enjoined by the order and injunction of this honorable court from directly or indirectly vending, delivering or working, or putting or continuing in
12 practice, operation, or use, or in anywise counterfeiting or imitating the said invention and improvement or any part thereof or any improvement in wire fences made in accordance therewith or like or similar to the barbed fence wire which they have heretofore sold in infringement of said letters patent No. 157,124, and that the said defendants may be decreed to pay the costs of this suit, and that your orators may have such further relief or such other relief as to this honorable court shall seem meet and as shall be agreeable to equity.

14.

May it please your honors to grant unto your orators the writ of injunction, issuing out of and under the seal of this honorable court, commanding, enjoining, and restraining the said defendants, John D. Wiler and D. Wiler, their servants, agents, attorneys, and workmen, and each and every of them, as is hereinbefore in that behalf prayed; and also may it please your honors to grant unto your orators a preliminary injunction in due form, as above prayed.

15.

13 May it please your honors to grant unto your orators the writ of subpœna, issuing out of and under the seal of this honorable court, directed to the said defendants, John D. Wiler and D. Wiler, commanding them, by a certain day and under a certain penalty, to be and appear in this honorable court, then and there to answer the premises, and to stand to and abide such order and decree as may be made against them.

And your orators will ever pray, etc.

WASHBURN & MOEN MANUFACTURING CO.,
By HENRY B. CRAGIN,
Attorney-in-Fact. [SEAL.]
ISAAC L. ELLWOOD,
By OFFIELD, TOWLE & PHELPS,
His Solicitors.

OFFIELD, TOWLE & PHELPS,
Solicitors and of Counsel for Complainants.

_____,
Of Counsel for Complainants.

UNITED STATES OF AMERICA, *Northern District of Iowa,* } ss:

On this 8th day of March, A. D. 1887, before me personally appeared Henry B. Cragin, attorney-in-fact of Washburn & Moen Manufacturing Company, the complainant corporation in the
14 above bill of complaint, who, having been by me duly sworn, depose- and say- that he has read the foregoing bill of complaint by him subscribed, and that the same is true of his own knowledge, except as to matters which are therein stated on information and belief, and as to those matters he believes it to be true.

Before me—

FREDERICK C. GOODWIN,
[SEAL.] *Notary Public.*

15 EXHIBIT A.

UNITED STATES PATENT OFFICE.

JOSEPH F. GLIDDEN, of De Kalb, Illinois.

Improvement in Wire Fences.

Specification forming part of Letters Patent No. 157,124, dated November 24, 1874; application filed October 27, 1873.

To all whom it may concern:

Be it known that I, Joseph F. Glidden, of De Kalb, in the county of De Kalb and State of Illinois, have invented a new and valuable improvement in wire fences; and that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, in which—

(Here follows diagram marked p. 16.)

Figure 1 represents a side view of a section of fence exhibiting my invention. Fig. 2 is a sectional view, and Fig. 3 is a perspective view, of the same.

This invention has relation to means for preventing cattle from breaking through wire fences; and it consists in combining, with the twisted fence-wires, a short transverse wire, coiled or bent at its central portion about one of the wire strands of the twist, with its free ends projecting in opposite directions, the other wire strand serving to bind the spur-wire firmly to its place, and in position, with its spur ends perpendicular to the direction of the fence-wire, lateral movement, as well as vibration, being prevented. It also consists in the construction and novel arrangement, in connection with such a twisted fence-wire, and its spur-wires, connected and arranged as above described, of a twisting-key or head-piece passing through the fence-post, carrying the ends of the fence-wires, and serving, when the spurs become loose, to tighten the twist of the wires, and thus render them rigid and firm in position.

J. F. GLIDDEN.

Wire-Fences.

No. 157,124. Patented Nov. 24, 1874.

No 130
W & M Mfg Co. et al } p. 16
vs.
Wiler et al

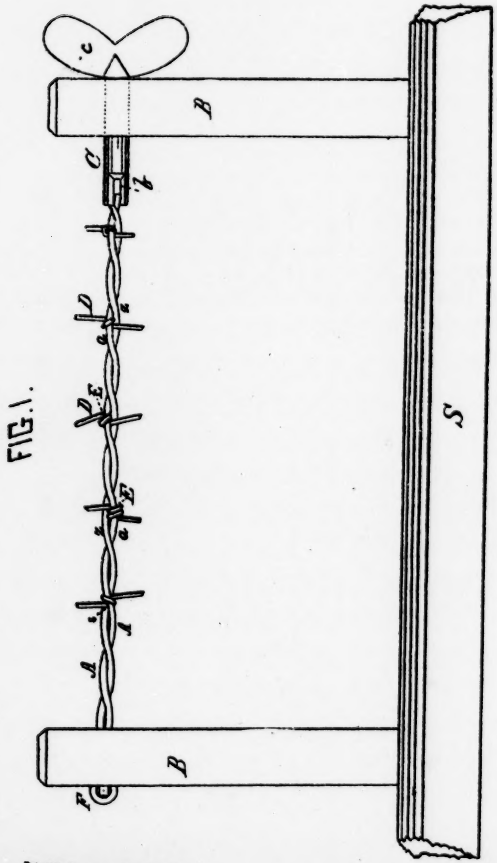


FIG. I.

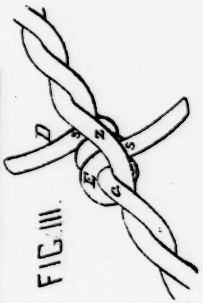


FIG. III.

FIG. II.

Witnesses:

J. R. Ellis

G. G. Bellows

Inventor:

Joseph F. Glidden.

By Gyd. Chapin

Atty.

In the accompanying drawings, the letter B designates the fence-posts, the twisted fence-wire connecting the same being indicated by the letter A. C represents the twisting-key, the shank of which passes through the fence-post, and is provided at its end with an eye, *b*, to which the fence-wire is attached. The outer end of said key is provided with a transverse thumb-piece, *c*, which serves for its manipulation, and at the same time, abutting against the post, forms a shoulder or stop, which prevents the contraction of the wire from drawing the key through its perforation in said post.

The fence-wire is composed at least of two strands, *a* and *z*, which are designed to be twisted together after the spur-wires have been arranged in place.

The letter D indicates the spur-wires. Each of these is formed of a short piece of wire, which is bent at its middle portion, as at E, around one only of the wire strands, this strand being designated by the letter *a*. In forming this middle bend or coil several turns are taken in the wire, so that it will extend along the strand-wire for a distance several times the breadth of its diameter, and thereby form a solid and substantial bearing-head for the spurs, which will effectually prevent them from vibrating laterally or being pushed down by cattle against the fence-wire. Although these spur-wires may be turned at once around the wire strand, it is preferred to form the central bend first, and to then slip them on the wire strand, arranging them at suitable distances apart. The spurs having thus been arranged on one of the wire strands are fixed in position and place by approaching the other wire strands *z* on the side of the bend from which the spurs extend, and then twisting the two strands *a z* together by means of the wire key above mentioned, or otherwise. This operation locks each spur-wire at its allotted place, and prevents it from moving therefrom in either direction. It clamps the bend of the spur-wire upon the wire *a*, thereby holding it against rotary vibration. Finally, the spur ends extending out between the strands on each side, and where the wires are more closely approximated in the twist, form shoulders or stops *s*, which effectually prevent such rotation in either direction.

Should the spurs, from the untwisting of the strands, become loose and easily movable on their bearings, a few turns of the twisting-key will make them firm, besides straightening up the fence-wire.

What I claim as my invention, and desire to secure by letters patent, is—

A twisted fence-wire having the transverse spur-wire D bent at its middle portion about one of the wire strands *a* of said fence-wire, and clamped in position and place by the other wire strand *z*, twisted upon its fellow, substantially as specified.

JOSEPH F. GLIDDEN.

Witnesses:
G. L. CHAPIN.
J. H. ELLIOTT.

17 (Endorsed:) No. 141. United States circuit court, northern district of Iowa, eastern division. In equity. Washburn & Moen Man'f'g Co. and Isaac L. Ellwood *vs.* John D. Wiler and D. Wiler. Bill of complaint. Filed March 12th, 1887. A. J. Van Duzee, clerk. Offield, Towle & Phelps, solicitors and of counsel for complainants.

And afterwards, to wit, on the 2nd day of April, A. D. 1887, there was filed in the office of the clerk of said court in said cause defendants' appearance; which said appearance is in the following words and figures, to wit:

UNITED STATES OF AMERICA,
Northern District of Iowa, Eastern Division.

WASHBURN & MOEN MANUFACTURING COMPANY and ISAAC L. ELLWOOD
vs.
JOHN D. WILER and D. WILER. } In Equity.

To the clerk of said court:

Please enter our appearance for the defendants in the above-entitled cause.

18 BLAIR & DUNHAM,
Att'ys for Def'ts, John D. Wiler & D. Wiler.

(Endorsed:) United States circuit court, northern district, eastern division of Iowa. Washburn & Moen Man'f'g Co. & I. L. Ellwood *vs.* John D. Wiler & D. Wiler. Defendants' appearance. Filed April 2, 1887. A. J. Van Duzee, clerk.

And afterwards, to wit, on the 4th day of April, A. D. 1887, there was filed in the office of the clerk of said court a subpœna in chancery in said cause; which subpœna is in the following words and figures, to wit:

19 UNITED STATES OF AMERICA,
Northern District of Iowa, Eastern Division, } *ss*:

The President of the United States to John D. Wiler and D. Wiler, partners in business under the firm name and style of Wiler Brothers, of Cedar Falls, Iowa:

We command you and each of you that you appear before the judge of the circuit court of the United States for the northern district of Iowa, at Dubuque, on the first Monday of April, it being the 4th day of April next (A. D. 1887), to answer to the bill of complaint of Washburn & Moen Manufacturing Company and Isaac L. Ellwood, this day filed in the office of the clerk of said court, and then and there to receive and abide by such judgment and decree as shall then and thereafter be made, upon pain of such judgment being pronounced — you by default.

To the marshal of the northern district of Iowa; returnable to

the April rule day, it being Monday, the 4th day of April, A. D. 1887.

Witness the Hon. Morrison R. Waite, Chief Justice of
[SEAL.] the Supreme Court of the U. S., at Dubuque, this the 12 day of March, A. D. 1887, and of the Independence the 111 year.

A. J. VAN DUZEE,
Clerk U. S. C. C., Northern District of Iowa,
By ALFRED HOBBS, *Deputy.*

MEMORANDUM.—The within-named defendants are notified that unless they enter their appearance in the clerk's office of
[SEAL.] said court, at Dubuque aforesaid, on or before the day to which the above writ is returnable, as above stated, the complaint will be taken against them as confessed and a decree entered thereon accordingly.

A. J. VAN DUZEE,
Clerk U. S. C. C., Northern District of Iowa,
By ALFRED HOBBS, *Deputy.*

19½ [Endorsed:] No. 141. Subpœna in chancery. Circuit court of the United States, northern district of Iowa. Washburn & Moen Manufacturing Co. — Isaac L. Ellwood *vs.* John D. Wiler and D. Wiler. Returnable to rule day, first Monday in April, A. D. 1887. Alfred Hobbs, deputy clerk. Filed April 4, A. D. 1887. A. J. Van Duzee, clerk. Offield, Towle & Phelps, comp'ts' sol-., Chicago, Ills.

This writ came into my hands for service on the 12th day of March, A. D. 1887, and I served the same on the within-named J. D. Wiler, D. Wiler, & Wiler Brothers on the 18th day of March, 1887, by delivering a true copy of the same to each of them & a copy to J. D. Wiler for firm, at Cedar Falls, in the county of Black Hawk and State of Iowa.

W. M. DESMOND,
U. S. Marshal.
T. M. HOPKINS, *Deputy.*

Marshal's fees:

Mileage, 100 miles	$6 00
Service on 3	6 00
Copy, 3	3 00
	$15 00

20 And afterwards, to wit, on the 30th day of April, A. D. 1887, there was filed in the office of the clerk of said court in said cause defendants' answer; which answer is in the following words and figures, to wit:

Circuit Court of the United States within and for the Northern District of Iowa, Eastern Division.

WASHBURN & MOEN MANUFACTURING COMPANY and ISAAC L. ELLWOOD
vs.
JOHN D. WILER & D. WILER.

In Equity. Answer.

I.

Comes now the defendant- herein, John D. Wiler and D. Wiler, and, answering the bill of complaint of the above-named complainants, saving and reserving to themselves all benefit and advantage of exception which can be had or taken to the many errors, uncertainties, and other imperfections in the said complainants' bill of complaint contained, say—

II.

That these defendants have no knowledge or information sufficient to form a belief as to the allegations in said complaint
21 that the said Joseph F. Glidden was and is the first and original inventor of certain new and useful improvements in wire fences described in certain letters patent set forth in said bill of complainants, except such knowledge and information as he has derived from the said bill of complaint, and therefore they leave the complainants to make such proof thereof as they may be advised is necessary in the premises.

III.

Defendants, further answering, say that they have no knowledge or information in regard to the application of the said Joseph F. Glidden for letters patent for his said alleged invention of certain new and useful improvements in wire fences, or that he obtained letters patent therefore on the 24th day of November, 1874, marked 157,124, except such knowledge and information as he has obtained from the bill of complaint of said complainants, and therefore they leave the complainants to make such proof thereof as they may be advised is necessary in the premises.

IV.

22 These defendants, further answering, say that they have no knowledge or information of any conveyance or assignment from the said Joseph F. Glidden to the said Isaac L. Ellwood or to the said Washburn & Moen Manufacturing Company of any interest in or to the said alleged letters patent No. 157,124, and they therefore leave said complainants to make such proof as they may be advised is necessary in the premises.

V.

These defendants, further answering, say that they have no knowledge as to the title of the said complainants to the said letters patent

No. 157,124 in, for, and through said eastern division of the northern district of or of the district of the State of Iowa and elsewhere in the United States or as to their ownership thereof, and therefore they leave the said complainants to make such proof thereof as they may be advised is necessary in the premises.

VI.

And, further answering, these defendants admit, upon information and belief, that complainants have made large sums of money from the sale and manufacture of wire fences; that they have
23 invested and expended large sums of money for the purpose of carrying on the business and manufacturing and selling said fence wire and to introduce the same (to wit, said pretended invention claimed by letters patent No. 157,124), these defendants have no knowledge except such as they have derived from said complainants' bill of complaint herein, and therefore leave the same for complainants to prove as they may be advised is necessary in the premises. They deny that the public have acquired in the claims of said complainant- any benefit and advantage to the alleged invention in said letters patent, and deny that the public have generally acknowledged and acquiesced in any rights of complainants in said pretended letters patent.

VII.

Admit that defendants received notice purporting to come from said complainants of their pretended rights under said letters patent No. 157,124, and that these defendants were, by selling wire, infringing said pretended patent, but these defendants have no knowledge or information as to whether said notice came from said complainants, and therefore leave the same for them to prove as they may seem advised.

VIII.

24 Defendants, further answering, admit that at Cedar Falls, in the State of Iowa, and nowhere else, they have been selling barbed wire made and manufactured by the Beat Em All Barb Wire Company, formerly of Waterloo, but now of Cedar Falls, Iowa, but allege that they have been selling the same for said company on commission only, and have never bought the same of said company, but acted only as its agent; and, further answering, say that they have no knowledge or information, further than what is alleged in said complaint, that the wire they are so selling for the Beat Em All Barb Wire Company is wire it manufactured without a license from complainants and against their will, or that the same is an infringement on said pretended letters patent No. 157,124 or in defiance of their pretended rights; and on information and belief deny every other allegation in paragraph 10 of said complaint not herein otherwise answered.

IX.

Admit that they have sold wire as alleged in the last paragraph of this answer, and deny that they have sold it in any other
25 manner, and deny that they have sold large quantities of the same, but only in moderate quantities, and have now but a small quantity on hand, and, as these defendants are informed and believe, the same is not being sold in violation of the rights of complainants, and that the same does not encourage and induce others to infringe the complainants' pretended invention.

X.

And, further answering on information and belief, say that said complainants ought not to maintain said suit, for that said complainants commenced in this court, in equity, a cause against the aforesaid Beat Em All Barb Wire Company, E. Hoag, S. Thompson, J. E. Farrell, and Abram Hoag, which cause is now pending in said court, is at issue, and a large amount of testimony has been taken on both sides, and the same is now nearly ready for submission, which cause is brought by said complainants against said defendants for manufacturing and selling the same wire which this defendant has been and is selling and has on hand, and for damages and royalty therefor, in which suit it is claimed that the manufacture and selling of said wire is an infringement of complain-
26 ants' alleged patent No. 157,124, which suit covers all the wire these defendants now have or have had or sold, which complainants now claim is in violation of said patents, and said suit will determine all the rights of complainants, if any they have, and which they claim are now involved in this suit.

XI.

Defendants, further answering, state on information and belief that these complainants instituted a suit in the United States circuit court for the northern district of Illinois against one Jacob Haish for an alleged infringement, among others, of the aforesaid alleged letters patent No. 157,124, and the same was brought to a hearing on the 18th day of December, 1880, before his honor Judge Drummond, who decided, among other things, that said patent No. 157,124 was void for want of invention, which decision is reported in volume 4 of the Federal Reporter, on pp. 900–916, which decision, so far as it relates to said patent No. 157,124, is made a part hereof.

XII.

Defendants, further answering, say that, in view of the state of the art, there was not at the time of the issuing of said
27 letters patent No. 157,124 any invention in the device, design, or fence described and claimed therein.

XIII.

And, further answering on information and belief, say that said Joseph F. Glidden was not the first and original inventor of the

device described and claimed in said letters patent No. 157,124, dated Nov. 24, 1874, but that the same and all substantial parts thereof had been shown and described in the following letters patent long prior to the date of said patent No. 157,124, to wit:

William D. Hunt, July 13, 1867	No.	67,117
Michael Kelly, February 11, 1868	"	74,372
Lucien B. Smith, June 25, 1867	"	66,182
Michael Kelly, November 17, 1868	"	84,062
George W. Otis, July 21, 1868	"	80,205
Louis J. Hawley, Feb'y 6, 1868	"	52,411
Byron Boardman, March 30, 1858	"	19,707
Elias C. Pallison, July 14, 1868	"	79,854
Joseph F. Gidden, May 12, 1874	"	150,683

and others, which defendants claims the right to put in and prove with the aforesaid on the trial of this cause.

XIV.

28 And, for a further defense, defendants say on information and belief that said Joseph F. Glidden was not the first inventor of said alleged improvement in wire fence described and claimed in said patent No. 157,124, but, on the contrary, the same or every essential part thereof, long prior to the said claimed invention of Joseph F. Gidden, was known and used by Chester D. Stone in Delhi township, Delaware county, Iowa, in June, 1872, and later—P. O. address same; Charles Beers, deceased, and E. A. Beers, P. O. unknown, at Mayfield township, De Kalb Co., Ill., in 1859 and later; Alvin Morley, deceased, at Delhi, Milo, and Delaware townships, Delaware county, Iowa, 1859 and later; William H. Long—P. O. and residence, Delaware, Oneida township, Delaware county, Iowa—June, 1873, and later; Henry Hutchinson, at Milo township—P. O. Manchester—in Delaware county, Iowa, 1859 and later, and by other persons, whose names are not now known to defendants, which names they ask leave to insert and to prove the use when names are ascertained.

XV.

29 And these defendants deny all manner of unlawful combination and confederacy with which in said bill they are charged, and deny all other matters and things in said complaint charged not herein admitted or otherwise answered, and ask to be hence dismissed with costs in their behalf wrongfully sustained.

JOHN D. WILER,
D. WILER,
WILER BROS.,
Defendants.

A. S. BLAIR,
Of Manchester, Iowa, Attorney for Def'ts.

UNITED STATES OF AMERICA, }
Northern District, Eastern Division, of Iowa (Black Hawk County). }

On this 27 day of April, A. D. 1887, before me personally appeared John D. Wiler, the defendants named in the foregoing answer, and on oath say- that *we* have heard said answer read and know its contents, which has been signed by *us*, and that the same is true of *our* own knowledge, except what is stated on information and belief, and as to those matters *we* believe it to be true.

JOHN D. WILER.

Subscribed and sworn to by John D. Wiler, of the firm of Wiler Bros., before me this 27 day of April, 1887.

[SEAL.]

H. B. CROPPER,
Notary Public.

30 (Endorsed:) United States court, northern district, eastern division of Iowa. Washburn & Moen M'f'g Co. and Isaac L. Ellwood *vs.* John D. Wiler and D. Wiler. Defendants' answer. Filed April 30, 1887. A. J. Van Duzee, clerk. A. S. Blair & Blair & Dunham, att'y- for def'ts.

And afterwards, to wit, on the 28th day of May, 1887, there was filed in the office of the clerk of said court in said cause a replication; which replication is in the following words and figures, to wit:

United States Circuit Court, Northern District of Iowa, Eastern Division.

WASHBURN & MOEN MANUFACTURING COMPANY and ISAAC L. ELLWOOD *vs.* JOHN D. WILER and D. WILER. } In Chancery.

The replication of Washburn and Moen Manufacturing Company and Isaac L. Ellwood, complainants, to the answer of John D. Wiler and D. Wiler, defendants.

These repliants, saving and reserving unto themselves now and at all times hereafter all and all manner of benefit and advantage of exception which may be had or taken to the man fold insuf-
31 ficiences of the said answer, for replication thereunto say that they will aver, maintain, and prove their said bill of complaint to be true, certain, and sufficient in law to be answered unto, and that the said answer of the said defendants is uncertain, untrue, and insufficient to be replied unto by these repliants; without this, that any other matter or thing whatsoever in the said answer contained material or effectual in the law to be replied unto and not herein and hereby well and sufficiently replied unto, confessed or avoided, traversed or denied, is true.

All which matters and things these repliants are and will be ready to aver, maintain, and prove as this honorable court shall direct,

and humbly pray as in and by their said bill they have already prayed.

OFFIELD & TOWLE,
Sol's for Comp'ts.

(Endorsed:) United States circuit court, northern district of Iowa, eastern division. In chancery. Washburn & Moen Manufacturing Company *et al. vs.* John D. Wiler *et al.* Replication. Filed 28 May, 1887. Alfred Hobbs, deputy clerk. Offield & Towle, solicitors for complainants.

32 And afterwards, to wit, on the 6th day of June, A. D. 1887, the same being the 29th day of the regular April term, A. D. 1887, of said court, there was recorded in Record 2, on page 348, of the records of said court and in said cause the following order, to wit:

WASHBURN & MOEN M'F'G CO. & ISAAC L. ELLWOOD *vs.* JOHN D. WILER *et al.* } No. 141. Equity.

In above cause, upon application of defendant-, both parties consenting thereto, it is ordered that for the purposes of trial this cause be and is consolidated with that of Washburn & Moen M'f'g Co. *vs.* Baet Em All Barbed Wire Company *et al.*, No. 119, equity, now pending in this court, the evidence taken therein to be held applicable to this cause, and the same decree upon the question of the validity and infringement of patent declared upon by complainant to be entered in this cause as shall be entered in that cause.

And afterwards, to wit, on the 5th day of January, A. D. 1888, the same being the 29th day of the November term, A. D.
33 1887, of said court, there was recorded in Record 2, on page 419, of the records of said court in said cause the following decree, to wit:

WASHBURN & MOEN M'F'G CO. *et als.* *vs.* JOHN D. WILER & D. WILER. } No. 141. Equity.

And now, this 5th day of January, A. D. 1888, this cause coming before the court, — same having been heretofore submitted, and the court being fully advised in the premises—

It is ordered, adjudged, and decreed that said cause be, and is hereby, dismissed on the merits, at the cost of complainants, and defendants have and recover their costs in this court, adjudged against complainants, taxed at $69.75.

And afterwards, to wit, on the 5th day of March, A. D. 1888, there was filed in the office of the clerk of said court in said cause a petition for allowance of appeal and a supersedeas bond; which said petition and bond are in the words and figures following, to wit:

In the Circuit Court of the United States in and for the Northern District of Iowa, Eastern Division.

WASHBURN AND MOEN MANUFACTURING COMPANY and Isaac L. Ellwood, Complainants,
34 *vs.*
JOHN D. WILER and D. WILER, Defendants.

Petition for Allowance of Appeal.

Come now the complainants herein and show that this is a suit in equity, brought for an injunction and an accounting against defendants for an infringement by defendants of the rights secured by letters patent of the United States No. 157,124, granted to Joseph F. Glidden, and dated November 24th, 1874, and the said cause having been theretofore fully submitted to the court, a decree was rendered therein on the 5th day of January, A. D. 1888, dismissing the said cause on the merits at the costs of complainants, adjudging and decreeing that the defendants have and recover against the complainants their costs, taxed at $——; and whereas in the rulings, decision, and decree rendered in said cause errors prejudicial to the complainants have been committed, for the purpose of correcting the same the complainants therefrom pray the allowance of an appeal to the Supreme Court of the United States, and that a citation to the defendants be issued as provided by law.
35 LEHMAN & PARK,
Complainants' Solicitors.

The appeal in the above-named cause is allowed, as prayed in the foregoing petition, upon the filing bond in sum of five thousand dollars. Execution of decree will be suspended.

O. P. SHIRAS,
Judge of the U. S. Circuit Court, Northern District of Iowa, Eastern Division.

(Endorsed:) No. 141. Equity. Washburn & Moen M'f'g Co. *et al. vs.* John D. Wiler & D. Wiler. Petition for allowance of appeal. Filed March 5th, 1888. A. J. Van Duzee, clerk.

Supersedeas Bond.

Know all men by these presents that we, The Washburn and Moen Manufacturing Company and Isaac L. Ellwood, Charles W. Pitcairn, and L. G. Comparet, of Des Moines, Iowa, are held and firmly bound unto John D. Wiler and D. Wiler in the full and just sum of five thousand dollars, to be paid to the said John D. Wiler and D. Wiler, their attorneys, executors, administrators, or assigns; to which payment, well and truly to be made, we bind ourselves, our heirs, executors, and administrators, jointly and
36 severally, by these presents.

Sealed with our seals and dated this 29th day of February, in the year of our Lord one thousand eight hundred and eighty-eight.

Whereas lately, at a term of the circuit court of the United States in and for the northern district of Iowa, eastern division, in a suit

depending in said court between Washburn and Moen Manufacturing Company and Isaac L. Ellwood, as complainants, and John D. Wiler and D. Wiler, as defendants, a decree was rendered against the said complainants, and they, the said Washburn and Moen Manufacturing Company and Isaac L. Ellwood, having duly obtained allowance of an appeal and citation to the said John D. Wiler and D. Wiler, citing and admonishing them to be and appear at the Supreme Court of the United States at its term, to be begun and holden on the second Monday of October next: Now, the condition of the above obligation is such that if the said Washburn & Moen Manufacturing Company and Isaac L. Ellwood shall prosecute their appeal to effect and answer all damages and costs if they fail to make their plea good, then the above obligation to be void; else to remain in full force & virtue.

WASHBURN & MOEN M'F'G CO. AND
ISAAC L. ELLWOOD,
By LEHMAN & PARK, *Att'ys.*
37 CHARLES W. PITCAIRN.
L. G. COMPARET.

Sealed and delivered in the presence of—
W. A. PARK.

STATE OF IOWA, } ss:
Polk County, }

We, Charles W. Pitcairn and L. G. Comparet, being duly and severally sworn, on oath depose and say and each for himself says that he is a resident of the State of Iowa; that he is one of the above-named sureties in the foregoing bond; that he is worth the sum of thirty thousand dollars beyond the amount of his debts, and that he has property liable to execution in the State of Iowa equal to the sum of thirty thousand dollars.

CHARLES W. PITCAIRN,
L. G. COMPARET, *Sureties.*

Subscribed and sworn to before me by Charles W. Pitcairn and L. G. Comparet this 29 day of Februa-y, A. D. 1888.

WM. A. PARK,
Notary Public, Polk Co., Iowa.

Approved Mar. 2, 1888.

O. P. SHIRAS, *Judge.*

U. S. OF AMERICA, } ss:
So. Dist. of Iowa, }

38 I, E. R. Mason, clerk of the said court of the United States, southern district of Iowa, central division, do hereby certify that if within bond was presented to me I would approve the same.

E. R. MASON,
Clerk U. S. Cir. Court, S. Dist. Iowa.

[SEAL.]

(Endorsed:) No. 141, equity. Washburn & Moen M'f'g Co. *et al.* *vs.* John D. Wiler *et al.* Supersedeas bond. Filed March 5, 1888. A. J. Van Duzee, clerk.

39 And afterwards, to wit, on the 12th day of September, A. D. 1888, there was filed in the office of the clerk of said court a citation in said cause; which said citation is in the words and figures following, to wit, with the marshal's return of service thereon:

In the Circuit Court of the United States in and for the Northern District of Iowa, Eastern Division.

WASHBURN & MOEN MANUFACTURING COMPANY and ISAAC L. ELLWOOD *vs.* JOHN D. WILER and D. WILER. } Citation.

The President of the United States of America to John D. Wiler and D. Wiler, Greeting:

You and each of you are hereby cited and admonished to be and appear at the Supreme Court of the United States, to be holden on the second Monday of October next, pursuant to an appeal allowed and filed in the clerk's office of the circuit court of the United States in and for the northern district of Iowa, eastern division, wherein the above-named Washburn and Moen Manufacturing Company and Isaac L. Ellwood are appellants and you are appellees, to show cause, if any you have, why the judgment and decree of the court in
40 said appeal mentioned should not be corrected and speedy justice should not be done to the parties in that behalf.

Witness the Honorable Morrison R. Waite, Chief Justice of the Supreme Court of the United States, this second day of March, A. D. 1888.

O. P. SHIRAS, *Judge.*

I, W. M. Desmond, U. S. marshal of the northern district of Iowa, do hereby certify and return that I received the within-attached citation on the 5th day of March, A. D. 1888, and that on the 3d day of April, A. D. 1888, in the eastern division of the northern district of Iowa, I served the same on the within-named defendants, John D. Wiler and D. Wiler, by reading the same to each of them and delivering to each of them personally a true copy of the said citation.

Dated April 3d, A. D. 1888.

W. M. DESMOND,
U. S. Marshal, Northern Dist. Ia.

Marshal's fees:

Mileage, 96 miles	5 58
2 services, 2.00	4 00
Copys, 1.00	2 00
	$11 58

41 (Endorsed:) United States circuit court, northern district of Iowa. Washburn & Moen Manufacturing Co. and Isaac L. Ellwood *vs.* John D. Wiler & D. Wiler. Citation. Filed Sept. 12, 1888. A. J. Van Duzee, clerk.

42 I, W. M. Desmond, U. S. marshal of the northern district of Iowa, do hereby certify and return that I received the within-attached citation on the 5th day of March, A. D. 1888, and that on the 3d day of April, A. D. 1888, in the eastern division of the northern district of Iowa, I served the same on the within-named defendants, John D. Wiler and D. Wiler, by reading the same to each of them and delivering to each of them personally a true copy of the said citation.

Dated April 3d, A. D. 1888.

W. M. DESMOND,
U. S. Marshal, Northern Dist. Ia.

Marshal's fees:

Mileage, 96 miles	5 58
2 services, 2.00	4 00
2 copys, 1.00	2 00
	$11 58

43 In the Circuit Court of the United States in and for the Northern District of Iowa, Eastern Division.

WASHBURN AND MOEN MANUFACTURING COMPANY and ISAAC L. ELLWOOD, Complainants,
vs.
JOHN D. WILER and D. WILER, Defendants.
} Citation.

The President of the United States of America to John D. Wiler and D. Wiler, Greeting:

You and each of you are hereby cited and admonished to be and appear at the Supreme Court of the United States, to be holden on the second Monday of October next, pursuant to an appeal allowed and filed in the clerk's office of the circuit court of the United States in and for the northern district of Iowa, eastern division, wherein the above-named Washburn and Moen Manufacturing Company and Isaac L. Ellwood are appellants and you are appellees, to show cause, if any you have, why the judgment and decree of the court in said appeal mentioned should not be corrected and speedy justice should not be done to the parties in that behalf.

Witness the Honorable Morrison R. Waite, Chief Justice of the Supreme Court of the United States, this second day of March, A. D. 1888.

O. P. SHIRAS, *Judge.*

[Endorsed:] Waterloo. 1147. United States circuit court, northern district of Iowa. Washburn & Moen Manufacturing Co. & Isaac L. Ellwood *vs.* John D. Wiler & D. Wiler. Citation. Filed Sept'r 12, 1888. A. J. Van Duzee, clerk.

44 And on the 21st day of December, A. D. 1887, there was filed in the office of the clerk of said court a deposition in said cause on the part of complainant; which deposition is in the following words and figures, to wit:

Copy.

United States Circuit Court, Northern District of Iowa, Eastern Division.

WASHBURN & MOEN MANUFACTURING COMPANY *et al.*
vs.
JOHN D. WILER and D. WILER. } In Equity.

To Messrs. Blair & Dunham, solicitors for defendants:

Please take notice that on Tuesday, the 31st day of May, A. D. 1887, at 11 o'clock a. m., we shall proceed to take testimony on behalf of complainants, to be used upon the hearing of the above-entitled cause, at our office, room 99, No. 187 Dearborn street, Chicago, Illinois, before Frederick C. Goodwin, Esq., a notary public, or other competent officer. The taking of testimony will continue from day to day until completed. You are invited to be present and cross-examine.

Chicago, Ill., May 27, 1887.

OFFIELD & TOWLE,
Solicitors for Complainants.

45 Service of above notice, by copy, acknowledged this 28th day of May, A. D. 1887, and time extended thirty days to complainants to put in preliminary evidence.

A. S. BLAIR,
Solicitor for Def'ts.

United States Circuit Court, Northern District of Iowa, Eastern Division.

WASHBURN AND MOEN MANUFACTURING COMPANY *et al.*
vs.
JOHN D. WILER and D. WILER. } In Equity.

Messrs. Blair & Dunham, solicitors for defendants:

Please take notice that on Tuesday, the 31st day of May, A. D. 1887, at 11 o'clock a. m., we shall proceed to take testimony on behalf of complainants, to be used upon the hearing of the above-entitled cause, at our office, room 99, No. 187 Dearborn street, Chicago, Illinois, before Frederick C. Goodwin, Esq., a notary public, or other competent officer. The taking of testimony will continue from day to day until completed. You are invited to be present and cross-examine.

Chicago, Ills., May 27, 1887.

OFFIELD & TOWLE,
Solicitors for Complainants.

STATE OF IOWA, } ss:
46 *County of Delaware,* }

Charles Husted, of lawful age, being first duly sworn, deposes and says that he served the above notice by leaving a copy thereof with Messrs. Blair & Dunham at their office, in Manchester, Iowa, at — o'clock — m., the 28th day of May, A. D. 1887.

CHAS. HUSTED.

[SEAL.] Subscribed and sworn to before me this 28th day of May, A. D. 1887.

S. S. SUMMERS,
Notary Public.

United States Circuit Court, Northern District of Iowa, Eastern Division.

WASHBURN & MOEN MANUFACTURING COMPANY *et al.* }
vs. } In Equity.
JOHN D. WILER and D. WILER. }

At Chicago, in the northern district of Illinois, on this 31st day of May, A. D. 1887, at 11 o'clock a. m., before me, Frederick C. Goodwin, a notary public within and for Cook county, Illinois, residing at Chicago, in said district, at the office of Offield &
47 Towle, room 99, No. 187 Dearborn street, Chicago, Illinois.

Present: C. K. Offield, Esq., on the part of said complainant-, no counsel appearing for defendants.

And thereupon the following proceedings were had before me in said cause pursuant to notices hereto attached:

Complainants' counsel her- offers in evidence certified copy of letters patent issued to Joseph F. Glidden, dated November 21, 1874, and numbered 157,124, and requests the notary to identify the same with this record and mark the same "Complainants' Exhibit Glidden, November, 1874, Patent."

Complainants' counsel also offers in evidence certified copies of the several assignments of said patents, showing the title of
48 the same to be in complainants, as alleged in the bill of complaint filed herein, and requests the notary to mark the same, after due identification herewith, as "Complainants' Exhibit Complainants' Title."

Complainants' counsel also offers in evidence two samples of wire sold and offered for sale by the above defendants at their place of business in the northern district of Iowa, eastern division, prior to the filing of the bill of complaint herein and within six months of the date of such filing, and requests the notary to identify the samwith this record, and mark the same "Complainants' Exhibit Defendants' Wire- Nos. 1 & 2," complainants' counsel stating in this connection that he offers such exhibits for the purpose of examining the expert witnesses now about to be put upon the stand, and that he will hereafter prove the possession and sale of such
49 exhibits as indicated above.

And thereupon complainants' counsel calls as a witness in their behalf DAVID J. POWERS, who, being first duly sworn to state the truth, the whole truth, and nothing but the truth, deposes and says in answer to interrogatories propounded to him by C. K. OFFIELD, Esq.:

Q. 1. Please state your name, age, residence, and occupation.

A. David J. Powers; age, 70 years and past; residence, Chicago; occupation, mechanical engineer and manufacturer.

Q. 2. Please state what experience you have had which enables you to understand different forms of mechanisms employed in the useful arts, and to compare analogous mechanisms one with the other for the purpose of understanding and explaining similarities and differences; and state also what experience you have had, if any, with patented inventions which enables you to understand the construction and operation of patented devices from a study of the drawings and specifications of letters patent covering the same.

50 A. I have had a wide experience as a mechanical engineer for many years and have also a thorough practical knowledge of mechanisms of various departments and lines of mechanism. I have also had occasion to direct the construction and operation of many machines and mechanical devices during a long and busy life. I have also had much to do with patents and patented inventions, and have applied for some forty patents, more or less, on my own inventions in this country and in foreign countries. I have also been employed as a mechanical expert to compare various mechanical devices as to similarities and differences, and have also been sworn and had occasion to testify as an expert witness in a great number of cases relating to patents pending in the United States courts during the last fifteen or twenty years.

Q. 3. Please examine carefully, if you have not already done so, "Complainants' Exhibit Gliddin, November, 1874, Patent," and state whether or not you understand the same and the construction and operation of the mechanisms therein described and shown.

51 A. Having examined said patent exhibit, I fully understand the construction and operation of the devices thereof.

Q. 4. In your opinion, would any ordinary skilled mechanic have any difficulty in constructing a practically operating device simply from the information furnished by the patent itself?

A. No; I do not consider that they would have any difficulty whatever in understanding the patent.

Q. 5. Please examine carefully "Complainants' Exhibit Defendants' Wires Nos. 1 & 2," and state if you understand the same, their construction and purpose.

A. Having examined said wire exhibits, I do understand the construction and purpose of them respectively.

Q. 6. Please compare "Complain-' Exhibit Glidden, November, 1874, Patent" with "Complainants' Exhibit Defendants' Wire-Nos. 1 & 2," and state whether or not you find the inventions, combinations, and devices described in said patent exhibit to be

52 embodied and contained in Complainants' Exhibit Defend-

ants' Wire- Nos. 1 & 2 and give your reasons fully and at large for any opinion you may express.

A. On comparing "Complainants' Exhibit Defendants' Wires Nos. 1 & 2" with the wire device shown, described, and claimed in complainants' patent No. 157,124 I find said wire exhibits to be identical in character in all respects with the wire device summed up in the claim of said patent exhibit, said wire exhibits being detached portion- of "a twisted fence wire having the transverse spur wire D bent at its middle portion about one of the wire strands *a* of said fence wire and clamped in position and place by the other wire strand *z* twisted upon its fellow, substantially as specified." The foregoing is substantially the summing up of the invention in the claim of complainants' patent, and wire exhibits Nos. 1 & 2, it will be noticed, are composed of two strands of wire, with short pieces of wire coiled between their ends around one strand, and are locked in position by twisting the barbed strand with its fellow strand, precisely the same as in the patent exhibit, and thus making
53 identically such a fence wire as is shown, described, and claimed in the patent exhibit. It will be noticed that Exhibit Two has "its barb coiled more times around the wire strand than Exhibit One, but this difference I do not regard as material, for the reason that the drawing of the patent shows barbs coiled around the wire strand more and less in amount, the same as the wire exhibits 1 & 2 differ from each other in that respect, thus rendering it obvious that the precise amount of coiling of the barbs around the wire strand was not considered material and would be governed more or less by the judgment of the mechanic making the wire as the amount desirable or required to complete the same. It will be noticed that the wire exhibits have barbs attached to each wire strand alternately, and it will also be noticed that such is the manner of applying them in the patent exhibit to the extent that some of the barbs are upon one strand and some upon the other, substantially the same as they are found in the wire exhibits. Therefore, as before said, I discover no material difference between "Complainants' Exhibit Defend-
ants' Wire- Nos. 1 & 2" and the wire device illustrated
54 in the patent exhibits summed up in the claim thereof. I notice that Fig. 2 of the patent in suit, on comparing it with defendants' wire No. 2, shows that said defendants' wire is the exact fac-simile of Fig. 2 of complainants' patent, except possibly as to the degree of sharpness of the points of the barb. This, however, is a wholly unimportant detail, which would be regulated entirely by the taste or opinion of the manufacturer or user, according to the amount of sharpness supposed to be required effecting the purpose in the way of protecting enclosures against unruly stock. It will be further noticed that the patent refers to these barbs as "spurs," and thus implies that they are or may have sufficient sharpness to deter animals from crowding upon fences and to cause them to be shy of such spurs after becoming familiar with them. Thus, practically, the amount of sharpness of a barb is a matter of choice wholly, reference being had to the particular purpose or use of it

according to the stock or animals that are liable to come in contact with it. In conclusion, I would say that the invention of
55 complainants' patent exhibit appears to me to be well stated and fully expressed in the language of the claim, and not requiring any material elaboration to be understood fully and entirely upon its face.

Q. 7. Do you know the actual date of the filing in the Patent Office of the application for "Complainants' Exhibit Glidden November, 1874, Patent"?

A. My recollection is that upon different copies of this Glidden patent that I have had occasion to examine when testifying during the last few years that the date of application was October 27, 1873.

Cross-examination:

X Q. 1. You say you have read and understand the patent to Joseph F. Glidden, No. 157,124, which is the patent in this suit. Will you state whether or not, in your opinion, the invention consists in putting the tranverse spur wire D, bent as described, about or on one of the wires of the fence wire?

A. I understand that to be a part of the invention as enumerated with the whole.

56 X Q. 2. Is that the invention of the patent when standing by itself?

A. I do not understand that it is.

X Q. 3. Having a fence wire with the spur wire D bent at its middle portion about such fence wire, would it come under this claim, in your opinion, if another wire were stre-ched alongside of it?

A. The simply stre-ching another wire along by the side of the one having the barbs would not, in my opinion, make such a wire as Glidden claims and shows in his patent.

X Q. 4. If we had single fence wire with the spur wire D bent at its middle portion about such single fence wire and another wire stre-ched alongside of it, would the twisting of those two wires together form the wire claimed by Glidden?

A. I understand that a barb made of a short piece of wire coiled between its ends around a fence-wire strand and a fellow wire
57 twisted with such strand sufficiently to secure the barbs in place would be such a wire as Glidden claims to have invented; and if the wire recited in the question is such a wire it would contain the Glidden invention.

X Q. 5. I find in the Glidden patent the following: "C represents the twisting key." What is the office of that twisting key?

A. At the time of the invention of this Glidden patent I understand that it was contemplated in some instances to barb wires already upon the posts of a fence, and key C was a device by which the two or more strands of wire could be twisted together after the barbs were applied, or could be twisted in the factory as the barbs were applied; but no reference is made to the key C in the claim of the patent, as I discover, and hence I had not regarded it as claimed or an essential feature of the invention in my direct testimony.

X Q. 6. If a fence such as you have described, consisting of two wires running side by side from one post to the other, had
58 barbs placed upon one of the wires and the device or twisting key C had been applied at one end of these two wires, would it have required the exercise of any inventive faculty to turn the twisting key C and twist the two wires together sufficient to hold the barbs in place?

A. I am of the opinion that it would not have required as much inventive faculty as strength with such a key as is shown to have twisted the wires sufficiently, and no invention merely to turn the key after everything was ready for it.

X Q. 7. Are you acquainted with the state of the art prior to November 24th, 1874, the date of this patent?

A. Yes; I consider that I am, as far as the prior barb wires are concerned.

X Q. 8. Is or is not the wire claimed in this patent shown, if not described, in a former patent of Glidden?

Complainants' counsel object to the question unless the at-
59 tention of the witness is called to the particular patent counsel refers to.

A. I do not understand that it is.

X Q. 9. For how long a time or since when have barbs or spurs been used on wire fences?

A. The date of the earliest patent with which I have acquaintance is June 26th, 1879. But I do not know how soon or when such fence was actually constructed or put in use.

X Q. 10. What was the shape of a barb wire in that patent, and how was it fastened to the fence or wire?

A. The barbs were composed of short straight pieces of pointed wire having one end inserted in a spool and the other ends extending outward in opposite directions, transverse to a longitudinal opening in the spool through *whit* it was strung, upon the single-strand fence wire at proper intervals and secured in position by bends in the wire at each end of the spool, the barb spool being capable of rotating upon the wire and the sharp points of the
60 wire being outward.

X Q. 11. Will you tell us when the next barb makes its appearance on the wires of the fences?

A. In the Hunt patent of July 23rd, 1867, about a month later than Smith, before referred to.

X Q. 12. What was the shape and form of the barb in the Hunt patent?

A. The Hunt patent consisted of certain spur wheels of sheet metal having points like a spur wheel strung upon a single fence wire at proper intervals.

X Q. 13. What is the next patent, and what is the shape of the spurs?

A. The next is the Kelly patent of February 11th, 1868, and shows and describes spurs cut from sheet metal with two opposite points,

and a hole in the center to permit them to be strung upon a single fence wire.

X Q. 14. How were those spurs retained in place?

61 A. The mode described and shown for retaining these barbs in place was by crushing the barb so as to narrow the opening, as shown in Fig. 8 of the drawing, and also to crush or flatten the wire where the barb is to stand.

X Q. 15. Will you state what construction is shown in Fig. 2 of this patent which you are describing, and how is it described in the specification?

A. Fig. 2 of the drawing shows two wires twisted together with sheet-metal perforated barbs secured upon one of them, and the specification recites as follows: "In relation thereto I can, when it is desirable to increase the strength of the wire, lay another wire of the same or different size alongside of a thorn wire, and can twist the two together by any suitable mechanism. This construction is represented in Fig. 2. It tends to insure a regularity in the distribution of the points in many different directions." The foregoing is all that I understand recites as to figure 2 of the drawing.

X Q. 16. In Glidden's patent of May, 1874, he says: "I do

62 not claim to have originated the devices known as spurs or prongs on the wires; they have been used before." Was there any invention in putting the coiled wire, spur, or prong which is marked E in the May patent in the place of the prong shown in Fig. 2 of the Kelly patent referred to in your last answer?

A. In my opinion there is enough difference between a sheet-metal perforated barb and a barb formed of a short piece of wire coiled centrally around a fence wire or coiled so as to form an eye capable of being strung on a fence wire, for the reason that it is substantially a different construction mechanically and capable of being constructed and applied to the wire automatically, whereas the sheet-metal barb of Kelly, so far as I know, has never been constructed and applied automatically to a fence wire, for the reason that each perforated barb has to be slipped onto the end of the wire strand in process of manufacture, and for the further reason that the coiled wire barb presents a broader base of support for the wire strand than

63 the sheet-metal barb. Thus the difference between these two barbs appears to be clearly a patentable difference, and was so regarded at the Patent Office, and, as I have good reason to know, has been so regarded by the United States courts, and I regard the difference clearly as a patentable one.

X Q. 17. The question was not as to the difference between the two barbs, but whether it required invention to put one in the place of the other in Kelly's twisted wire, shown in Fig. 2.

A. To this form of the question I reply that, for any reason that I can comprehend, there was invention required to construct and apply a wire barb like Glidden's in place of a sheet-metal perforated barb like Kelly's. It clearly was a new kind of barb and has proved exceedingly useful in practice, and consequently constituted what the Patent Office required to embody or contain an invention. It will be noticed that the Patent Office has granted several hundred

modifications of barbs and wires and modes of applying them since the date of complainants' patent, and they are ordinarily considered good authority as to how much or how little is required to
64 constitute invention. Supposing Kelly or anybody else had made a Glidden barb and had it in hand ready for use, there might have been no more invention in putting it upon Kelly wire of Fig. 2 and crushed it down to rigidly attach it than to have put on the sheet metal that Kelly shows in Fig. 2. There probably would not have been.

I do find in the Kelly patent that the barb as shown and described — to be crushed upon the wire to hold it in position, and that the additional wire is stated to be for additional strength and distribution of the points of the barbs merely, while in the Glidden patent referred to I find an entirely different barb in the main, with no provision for crushing it, but with an additional wrapping wire twisted together with the barb strand to secure the barbs in position.

I do not consider that any one of the patents in the prior state of the art embody or contain the invention shown, described, and claimed in the complainants' Glidden patent, on which this suit is brought.

X Q. 18. How can the prong in the patent in suit be new
65 when it is shown in the Glidden patent of May, 1874, which was six months prior to the one in suit?

A. For the reason that I understand that the patent sued on was applied for, and therefore was an existing invention at that date, October 27th, 1873, while the patent of May 12th, 1874 (though issued prior to the other), was not applied for until March 14th, 1874. Consequently this former patent could not be held to antedate the prior application of the subsequently granted patent.

D. J. POWERS.

Subscribed and sworn to this 31st day of May, A. D. 1887, before me—

[SEAL.] FREDERICK C. GOODWIN,
Notary Public.

Adjourned to Wednesday, June 1, 1887, at 10 o'clock a. m.

WEDNESDAY, *June* 1, 1887—10 o'clock a. m.

Met pursuant to adjournment.

Present: Same as before.

And thereupon complainants' counsel calls as a witness in
66 their behalf CLARANCE B. E. HOYT, who, being first duly sworn to state the truth, the whole truth, and nothing but the truth, deposes as follows in answer to interrogatories propounded by C. K. OFFIELD, Esq.:

Q. 1. Please state your name, age, residence, and occupation.

A. Clarance E. Hoyt; 38; Sterling, Illinois; travelling salesman.

Q. 2. In whose employment are you now and how long a time have you been so employed?

A. Washburn & Moen Manufacturing Company; since January 3d, 1887.

Q. 3. What is and has been the special character of your employment?

A. Selling the goods manufactured by Washburn & Moen Manufacturing Company; principally barb wire.

Q. 4. Do you know the defendants in this case? Did you ever meet them?

A. I have met one of them at Cedar Falls, Iowa.

67 Q. 5. At their place of business?

A. Yes.

Q. 6. What is the business of these defendants at Cedar Falls, Iowa?

A. Hardware—engaged in selling hardware.

Q. 7. Did these defendants have any barb fence wire in stock or for sale at their place of business in Cedar Falls, Iowa, when you visited them?

A. I saw two spools on the sidewalk in front of their store. They told me they were selling that wire.

Q. 8. For what purpose did you visit these defendants at their place of business?

A. To sell them the barb wire manufactured by Washburn & Moen.

Q. 9. What, if anything, did these defendants or either of them say to you at that time about their handling and sale of barb fence wire?

68 A. The defendant I saw told me they were handling other wire and they didn't wis- to handle ours.

Q. 10. What, if anything, did they say about the barb wire that they handled and sold being licensed wire of the Washburn & Moen Manufacturing Company?

A. They said they knew it was unlicensed—was not licensed wire—but that the parties who manufactured it had told them to sell the wire and they would stand between them and any lawsuit brought by Washburn & Moen.

Q. 11. At that visit to these defendants did you obtain from them samples of the two spools of wire that they had in front of their place of business?

A. No; I obtained samples from pieces of wire they had in the store.

Q. 12. Look at the two pieces of wire now shown you, marked "Defendants' Wire No. 1" and "Defendants' Wire No. 2," and state when and where, if ever, you first saw them.

69 A. I believe these to be the two samples that I obtained from one of the defendants at their place of business.

Q. 13. Were the two spools of wire which you saw at the defendants' place of business respectively like these Complainants' Exhibit Defendants' Wire- Nos. 1 & 2?

A. They were.

Q. 14. What time of the year was it and what year that you visited the store of these defendants at Cedar Falls, Iowa, and ob-

tained the two samples of wire identified and testified to by you and saw the spools of wire so described in your testimony?

A. About the 24th of February, 1887. I know it was between the 20th and 25th of February.

Q. 15. Did you visit defendants' place of business and see this wire, as you have testified, upon more than one day in February, 1887?

A. I passed by the store and saw the wire upon several
70 different days. I was in the store only upon two different days.

CLARENCE E. HOYT.

Subscribed and sworn to this 1st day of June, A. D. 1887, before me—

[SEAL.] FREDERICK C. GOODWIN,
Notary Public.

And thereupon complainants' counsel calls as a witness in their behalf JEROME W. MILLINGTON, who, being first duly sworn to state the truth, the whole truth, and nothing but the truth, deposes as follows in answer to interrogatories propounded to him by C. K. OFFELD, Esq.:

Q. 1. Please state your name, age, residence, and occupation.

A. Jerome W. Millington; 53; Chicago; employed by the Washburn & Moen Manufacturing Company looking after their barb-wire patent interests in its various branches.

Q. 2. For how long a time have you been so employed by the corporation complainant?

A. Directly for the last seven years and indirectly for ten years.

71 Q. 3. Is it any part of your employment to acquaint yourself with the different persons or corporations taking or holding license from the above-named complainants under their barb-wire patents and to keep track generally of such licensees for the purpose of ascertaining whether or not such licensees are living up to the terms and conditions of their license, so far as their manufacture and shipment of barb wire is concerned?

A. It is, and I am acquainted with all or nearly all their licensees, with only one or two exceptions. I am acquainted with the styles of wire made by all of their licensees and know all of their licensees in the United States, but not in Canada. I hold in my possession copies of all the licenses issued in the United States to various parties.

Q. 4. What restriction, if any, does the corporation complainant place upon their licensees as to the styles of barb wire they are to make?

A. They restrict all of their licensees to a particular style or styles, a sample of which is attached to their licenses, duplicates of which samples I also have in my possession.

72 Q. 5. Do you know whether or not the complainants reserve for themselves the sole and exclusive right to manu-

facturing any particular style of barb fence wire; and, if so, under what name is that wire known to the trade?

A. They do reserve unto themselves the exclusive right to manufacture the wire known as the "Glidden" wire. No licensee has ever been licensed or allowed to manufacture this particular style of wire known as the "Glidden" wire.

Q. 6. Do the complainants themselves manufacture it?

A. They do, in large quantities.

Q. 7. Look at the two samples of wire introduced in evidence in this case and identified by the deposition of Mr. Hoyt under "Nos. 1 & 2," and state what style of barb wire these two samples or exhibits are.

A. They are what is known as the "Glidden" wire, and are reserved unto themselves for their own and exclusive manufacture.

Q. 8. State whether or not the two samples marked in this
73 case "Complainants' Exhibit Defendants' Wire Nos. 1 & 2" were made by either of the complainants in this case, and how you know this fact.

A. Neither of the samples were made by the complainants in this case, and I know the fact for the reason that the coils of the barb are not in either case wrapped in anything near as workmanlike a manner as they can be and are by the machinery used by the complainants in this case; neither are they cut in the same manner as to their points.

JEROME W. MILLINGTON.

Subscribed and sworn to this 1st day of June, A. D. 1887, before me—

[SEAL.] FREDERICK C. GOODWIN,
Notary Public.

Complainants here rest their *prima facia* case.

STATE OF ILLINOIS, } ss:
County of Cook, }

I, Frederick C. Goodwin, a notary public in and for the county of Cook, in the State aforesaid, do hereby certify that the foregoing depositions of David J. Powers and Jerome W. Millington
74 were taken before me at the time and place therein specified, pursuant to notice hereto attached, by consent of counsel made a part of this record; that the parties to said cause were present at the taking of same—complainants, by their counsel, C. K. Offield, Esq., no one appearing for the defendants, as therein appears; that before deposing the said David J. Powers and Jerome W. Millington were each by me first duly sworn to tell the truth, the whole truth, and nothing but the truth in the cause now pending in the United States circuit court for the northern district of Iowa, in the eastern division, wherein Washburn & Moen Manufacturing Company *et al.* are complainants and John D. Wiler and D. Wiler are defendants; that said depositions were reduced to writing from said witnesses' statements, and the same duly subscribed and sworn to by each of them, as therein appears.

J. F. GLIDDEN.

Wire-Fences.

No. 157,124.

Patented Nov. 24, 1874.

No 130
W. & M. Mfg. Co. et al
vs.
Wiler et al
} p. 77

FIG. I.

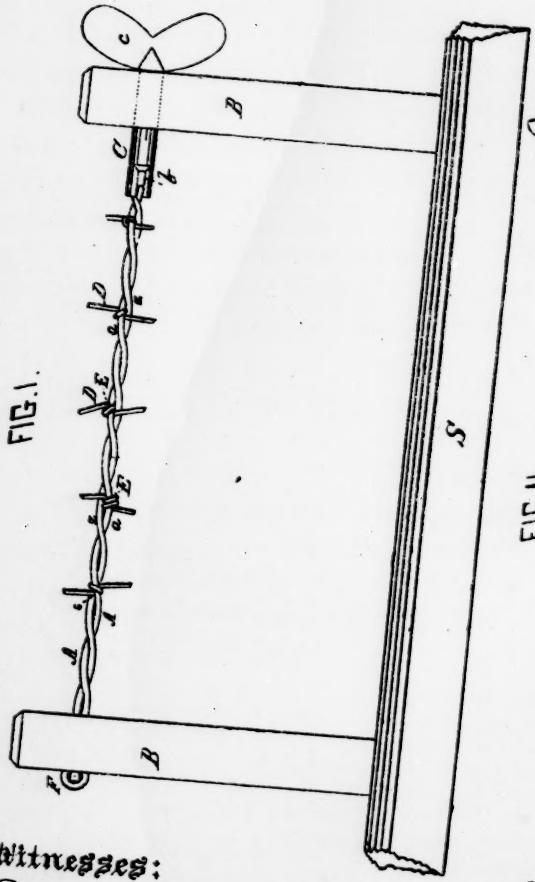


FIG. III.

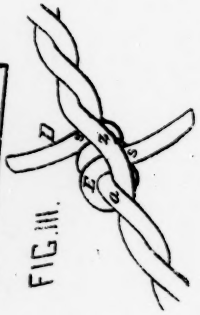


FIG. II.

Witnesses:

D. M. Ellis

E. G. Bellows

Inventor:

Joseph F. Glidden,

By G. D. Chapin

Atty.

, 1874.

And I do further certify that I am neither attorney nor of counsel for any of the parties in said deposition or caption named and am in nowise interested in the result of said cause.

In testimony whereof I have hereunto set my hand and notarial seal this first day of June, A. D. 1887.

FREDERICK C. GOODWIN,

75 [SEAL.] *Notary Public.*

Fees for writing and certifying depositions, $7.50, paid by complainants' solicitors.

FREDERICK C. GOODWIN,
Notary Public.

Endorsed: Filed Dec. 21, 1887. A. J. Van Duzee, clerk.

And upon the same day there was filed in the office of the clerk of said court in said cause "Complainants' Exhibit Glidden November, 1874, Patent;" which said complainants' exhibit is in the following words, figures, and drawings, to wit:

76 UNITED STATES PATENT OFFICE.

JOSEPH F. GLIDDEN, of De Kalb, Illinois.

Improvement in Wire Fences.

Specification forming part of Letters Patent No. 157,124, dated November 24, 1874; application filed October 27, 1873.

To all whom it may concern:

Be it known that I, Joseph F. Glidden, of De Kalb, in the county of De Kalb and State of Illinois, have invented a new and valuable improvement in wire fences; and that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, in which—

(Here follows diagram marked p. 77.)

Figure 1 represents a side view of a section of fence exhibiting my invention. Fig. 2 is a sectional view, and Fig. 3 is a perspective view, of the same.

This invention has relation to means for preventing cattle from breaking through wire fences; and it consists in combining, with the twisted fence-wires, a short transverse wire, coiled or bent at its central portion about one of the wire strands of the twist, with its free ends projecting in opposite directions, the other wire strand serving to bind the spur-wire firmly to its place, and in position, with its spur ends perpendicular to the direction of the fence-wire, lateral movement, as well as vibration, being prevented. It also consists in the construction and novel arrangement, in connection with such a twisted fence-wire, and its spur-wires, connected and arranged as above described, of a twisting-key or head-piece passing through the fence-post, carrying the ends of the fence-wires, and

serving, when the spurs become loose, to tighten the twist of the wires, and thus render them rigid and firm in position.

In the accompanying drawings, the letter B designates the fence-posts, the twisted fence-wire connecting the same being indicated by the letter A. C represents the twisting-key, the shank of which passes through the fence-post, and is provided at its end with an eye, *b*, to which the fence-wire is attached. The outer end of said key is provided with a transverse thumb-piece, *c*, which serves for its manipulation, and at the same time, abutting against the post, forms a shoulder or stop, which prevents the contraction of the wire from drawing the key through its perforation in said post.

The fence-wire is composed at least of two strands, *a* and *z*, which are designed to be twisted together after the spur-wires have been arranged in place.

The letter D indicates the spur-wires. Each of these is formed of a short piece of wire, which is bent at its middle portion, as at E, around one only of the wire strands, this strand being designated by the letter *a*. In forming this middle bend or coil several turns are taken in the wire, so that it will extend along the strand-wire for a distance several times the breadth of its diameter, and thereby form a solid and substantial bearing-head for the spurs, which will effectually prevent them from vibrating laterally or being pushed down by cattle against the fence-wire. Although these spur-wires may be turned at once around the wire strand, it is preferred to form the central bend first, and to then slip them on the wire strand, arranging them at suitable distances apart. The spurs having thus been arranged on one of the wire strands are fixed in position and place by approaching the other wire strands *z* on the side of the bend from which the spurs extend, and then twisting the two strands *a z* together by means of the wire key above mentioned, or otherwise. This operation locks each spur-wire at its allotted place, and prevents it from moving therefrom in either direction. It clamps the bend of the spur-wire upon the wire *a*, thereby holding it against rotary vibration. Finally, the spur ends extending out between the strands on each side, and where the wires are more closely approximated in the twist, form shoulders or stops *s*, which effectually prevent such rotation in either direction.

Should the spurs, from the untwisting of the strands, become loose and easily movable on their bearings, a few turns of the twisting-key will make them firm, besides straightening up the fence-wire.

What I claim as my invention, and desire to secure by letters patent, is—

A twisted fence-wire having the transverse spur-wire D bent at its middle portion about one of the wire strands *a* of said fence-wire, and clamped in position and place by the other wire strand *z*, twisted upon its fellow, substantially as specified.

JOSEPH F. GLIDDEN.

Witnesses:

G. L. CHAPIN.

J. H. ELLIOTT.

78 & 79 UNITED STATES OF AMERICA, } ss:
Northern District of Iowa, }

I, A. J. Van Duzee, clerk of the United States circuit court in and for the northern district of Iowa, do hereby certify that the foregoing transcript contains full, true, and complete copies of the record and proceedings in the case of Washburn & Moen Manufacturing Company and Isaac L. Ellwood, complainants, *vs.* John D. Wiler and D. Wiler, defendants, as full, true, and complete as the originals of the same now remain on file and of record in my office.

I further certify that there was introduced in evidence in said cause, in addition to the foregoing record, two exhibits of wire, marked respectively "Complainants' Exhibit Defendants' Wire No. 1" and "Complainants' Exhibit Defendants' Wire No. 2," which said two exhibits are hereto attached.

I further certify that the original citation, with the return of service thereof endorsed thereon, is hereto attached and returned herewith.

In testimony whereof I hereunto subscribe my name and
80 affix the seal of said court at Dubuque, in said district, this 14th day of September, A. D. 1888.

[Seal Circuit Court U. S., Northern District of Iowa.]

A. J. VAN DUZEE,
Clerk U. S. Circuit Court, Northern District of Iowa.

Costs of transcript	$20 20
Marshal on citation	11 58
	$31 78

Endorsed on cover: N. Iowa C. C. U. S. No. 130. The Washburn & Moen Manufacturing Company and Isaac L. Ellwood, appellants, *vs.* John D. Wiler and D. Wiler. Filed September 28, 1888.

Office Supreme Court U. S.
FILED.
DEC 1 1891
JAMES H. McKENNEY,
CLERK.

Supreme Court of the United States

OCTOBER TERM, 1891. No. 128.

THE WASHBURN & MOEN MANUFACTURING COMPANY AND ISAAC L. ELWOOD,
Appellants,

vs.

THE BEAT 'EM ALL BARBED WIRE COMPANY, SALMON THOMPSON, WILLIAM E. FARRELL, EGBERT HOAG, AND ABRAM HOAG,
Appellees.

APPEAL FROM THE CIRCUIT COURT OF THE UNITED STATES FOR THE NORTHERN DISTRICT OF IOWA.

BRIEF AND ARGUMENT FOR APPELLEES.

D. B. HENDERSON,
Counsel.

Supreme Court of the United States

OCTOBER TERM, 1891. No. 128.

THE WASHBURN & MOEN MANUFACTURING COMPANY AND ISAAC L. ELWOOD,
Appellants,

vs.

THE BEAT 'EM ALL BARBED WIRE COMPANY, SALMON THOMPSON, WILLIAM E. FARRELL, EGBERT HOAG, AND ABRAM HOAG,
Appellees.

APPEAL FROM THE CIRCUIT COURT OF THE UNITED STATES FOR THE NORTHERN DISTRICT OF IOWA.

BRIEF AND ARGUMENT FOR APPELLEES.

MAY IT PLEASE YOUR HONORS:

This is an action brought on letters patent granted to Joseph F. Glidden, dated November 24, 1874, No. 157,124, for an improvement in wire fences.

The bill is of the usual form, alleging the issue of the patent, its subsequent assignment to complainants, the infringement by the defendants; and it also sets up several suits involving the validity of the patent. (Rec., Vol. I, 1-17.)

The defendants, answering (Rec., Vol. I, 19-29), deny the infringement of any of complainants' rights, and, with others, put at issue these two questions:

1. From the state of the art, did the "improvement in wire fences," for which patent No. 157,124 was issued to Joseph F. Glidden on November 24, 1874, show patentable novelty, and was there any invention in the improvement described and claimed in said letters patent?

2. Was Joseph F. Glidden the first inventor of the said improvement in wire fences?

Defendants also allege that the complainants brought a suit in the Circuit Court of the United States for the Northern District of Illinois against one Jacob Haish, and that upon the hearing of the case on the 13th day of December, 1880, Judge Drummond decided that said patent, No. 157,124, was invalid, and dismissed the bill as to that patent.—Washburn & Moen Mfg. Co. *vs.* Haish, 4 Fed. Rep., 913. And to support this allegation the defendants put the record of this case in evidence. (Rec., Vol. II, 1873, 19-38.)

The dogged persistence with which these complainants have exacted tribute from the American people for the use of a thing no more theirs than the waters of the earth or the free air of heaven has made the record of this case somewhat voluminous and cumbersome, and while your Honors may get a clear and concise understanding of the proofs therein made by a careful reading of the opinion of the learned court below (Rec., Vol. I, p. 29 *et seq.*), we ask your indulgence while briefly setting out some of the points relied upon by the defendants.

First, then, what was the state of the art of making barbed wire for fencing purposes at the time this same Joseph F. Glidden enters the field as an inventor on the subject? Fences of various kinds were old and had been in use many years. Spikes, nails, stones, and even broken

glass and earthenware had been used, by driving them into rails and posts, and by putting them on top of fences to make them more effective in keeping out poachers. The thorned hedge, which gave the first ideas of barbed fences, had long been used, both in this country and England. Following these the picket fence, a great many patents for which have been granted. With the settlement of the prairies and their scarcity of timber, the wire fence first makes its appearance. On the trial many patents for wire fence were put in evidence. The first of these for which patent No. 5,884 was granted to Z. Knapp October 24, 1848 (Rec., Vol. II, 1992), shows a plain wire fence, stretched and held in place by mortises through wooden posts. The Leavenworth patent, October 30, 1849 (Rec., Vol. II, 1989), shows the first barb-wire fence, pointed pickets acting as the barbs and held in place by coils in the wire rails. The I. Knapp patent, No. 43,052, June 7, 1864, and H. B. Myers' patent, No. 45,298, only need the iron or steel barbs to make them complete. (Rec., Vol. II, 2007, 2009.) The novelty of coiling a short piece of wire pointed at its ends about a rod or wire to make it more effective in its purpose is given in the Hawley patent, No. 52,411, February 6, 1886, and could readily be applied to fence wire. (Rec., Vol. II, 2007.)

In the J. Moore patent (Rec., Vol. II, 1989), issued June 30, 1857, we have a wire fence composed of two wires, above and below, twisted together to hold the pickets firmly and secure them from longitudinal and circular motion about the wire rails, which is one of the elements claimed in complainants' patent.

The first complete barbed-wire fence patented is that of William D Hunt, No. 67,117, July 23, 1867. (Rec., Vol. II., 2003) Although the barb is not wire, it is metal and attached to fence wire, and serves the purpose. We find, however, that the pointed wire is used as a barb

in the Lucian B. Smith patent, No. 66,182, June 28, 1867. (Rec., Vol. II, 2004.) Instead of forming the hub by coiling the wire around the cable, it is formed by a spool of wood, the wooden hub forming an eye the same as the coil of the Glidden barb; the only difference between the two is the material of which they are made.

This patent of Smith's is held to show no invention because anticipated by the said William D. Hunt patent (Complainants vs. Jacob Haish, 4 Fed. Rep., 900); but, whether valid or not, it is a publication to the world of a particular device, and is a part of the art of barbed-wire making.

We next come to patent No. 74,379, granted to Michael Kelly February 11, 1868 (Rec., Vol. II, 2000), which contains every combination and every essential element found in the Glidden patent sued on in this case, unless it be the blunt point of the barb, and complainants have abandoned that. Kelly made his wire by placing sharp, two-pointed barbs, with an eye at their middle portion at intervals on a single wire, and twisting another unbarbed wire with it, formed a cable of complete barbed-wire fencing. Large quantities of this wire have been manufactured and is now in use, as is shown by the testimony of complainants' own witness, A. K. Stiles, formerly president of the Thorn Wire Hedge Company of Chicago, who says that there had been made and sold between 2,000 or 3,000 tons annually for eight or nine years, or more. (Rec., Vol. I, 401.)

Six years after this last-named patent Glidden comes into the field with what complainants set up as their patent, which defendants infringe: "A twisted fence wire, having the transverse spur wire D, bent at its middle portion about one of the wire strands of said fence wire, and clamped in position and place by the other wire strand twisted upon its fellow, substantially as specified."

A certified copy of the file wrapper and contents of this

Glidden patent, No. 157,124, as it appears in the Commissioner of Patent's Office, was put in evidence by defendants (Rec., Vol. II, 1965–79), and shows the difficulty he had in obtaining a patent for his combination of elements. It was three times rejected by the Examiner (Rec., Vol. II, 1967–69–70), and justly so. The idea of barbing fence wire was Hunt's (Complainants *vs.* Haish, 4 Fed. Rep., 915; same *vs.* Wire Co., 24 *id.* 24,) and so held by the court below.

The idea of stringing pointed barbs on one wire and holding them in place by twisting therewith a fellow wire was Kelly's. (Complainants *vs.* Haish, supra.; also the opinion of the Examiner of Patents, already referred to.)

All the difference that can possibly be shown in the Kelly and Glidden wire is the way of making the barb. While Glidden claims that his second wire "clamps" or "locks" the barb, it is no different from the effect obtained by the twisting of the wires in Fig. 2 of the Kelly patent. Glidden lays his second wire alongside and twists it with the barbed one, thus locking the barbs; and so does Kelly. And this was one of the elements claimed by Kelly, for he says in regard to the twisting of the wires: "It tends to insure a regularity in the distribution of the points in many different directions," to *insure regularity* in distribution. He says, further: "Some of the advantages may be secured by simply stringing the thorns on cords of hemp or other analogous material (wire, if the court please), holding them in place by twisting two or more cords together." (Rec., Vol. II, 2002.) Taking the barbs strung on one wire and twisting therewith another wire, as shown in Fig. 2 Kelly patent, and we contend it is axiomatic that the twisting will have a locking and blocking effect on the barbs, both as to lateral or circular motion.

As to the barb, then. Glidden himself does not in his original application claim to have originated the form of

barb, and in his amendment to said application, dated December 12, 1873, says (Rec., Vol. II, 1969): "The twister forms a part of the fence, both in the construction thereof and during the time the fence is in use, to keep the prongs in place and draw the wires tight. I disclaim the invention of the prongs *per se* broadly, as such have been attached to wire fence before." And in his testimony in matter of interference Glidden vs. Haish, put in evidence (Rec., Vol. II, 1983, answer X Int. 24): "I never claimed to have originated the barbs. The drawing and specifications show what I *done*."

So, also, in his specifications for his May 12th, 1874, patent, No. 150,683, which he afterward has reissued to cover the barb in particular, application filed March 14th, 1874 (Rec., Vol. II, 1997), wherein this same barb is shown, he says: "I do not claim to have originated the devices known as 'spurs' or 'prongs' on the wire, they having been used before," *devices* known as spurs, which means coil and all. In this claim we have no doubt he was honest and truthful and had seen them in his own neighborhood, as defendants have proven by five witnesses that such a fence there existed from 1857 to as late as 1877, and will call the court's attention to it further on. Glidden at best was but an imitator and did not have the mechanical ingenuity to see the practibility of this barb, even if such *had been* his invention, for in his specifications for patent 157,124 (the one at bar), as they finally stand after various amendments, he says: "Although these spur wires may be turned at once around the wire strand, it is preferred to form the central bend first and then slip them on the wire strand," just the same as Kelly had done for seven years. If there is any superiority in this barb it is in the way it can be adjusted *at once* on the wire. Defendants have shown that the Kelly barb takes less metal and makes a fence fully as

effective as the pretended Glidden patent. (Rec., Vol II, 1583; Int. 20, Vol. I, 410; X-Q. 20, Vol. I, 593; Vol. II, 1755.) Furthermore, it is in his patent No. 150,683, dated May 12th, 1874, not in this suit, and its reissue where Glidden claims his barb, formed of a short piece of pointed wire, secured in place upon the fence wire by coiling between its ends, forming to projecting points." (Rec., Vol. II, 1995.) Now, if there *is* any patentable novelty in this device, and if the same was covered by the patent in suit—No. 157,124, Nov. 24th, 1874—this latter patent is void as to the barb, having already been claimed in a prior patent, No. 150,683, May 12th, 1874, as stated.

In the case of Complainants vs. Haish, already cited, 4 Fed. Rep. 913, Judge Blodgett says:

"The second Glidden patent of Nov. 24th, 1874, is for a twisted fence wire having a transverse spur wire (D) bent at its middle portion. The proof shows that the final form of fence wire and spur, which has been adapted for practical use, is substantially that shown in the last Glidden patent, but it seems to us there is nothing left in the line of invention to justify the issue of this patent to Glidden as an inventor. The idea of barbing fence wire was Hunt's. The idea of fixing the barb rigidly upon the wire and holding it in place by another wire twisted upon it was Kelly's. The wire barb looped over the wire or one of the wires was that of Glidden's earlier patent, and by cramping all these devices into one finished wire a result is obtained substantially like that shown in the final Glidden patent of November, 1874. There was nothing new in Glidden's last patent and no room for the claim of invention in the wire therein provided."

In Suffolk & Co. vs. Hayden, 3 Wal. 315, Mr. Justice Nelson, for this court, says:

"Where the Patent Office grants a patent for one invention, and, afterwards, upon a claim filed previously to that on which the patent has been granted, issues another—the second patent, not the first, is void."

It seems to us this should determine the invalidity of the second Glidden patent, which is the one sued on.

But, should your Honors not hold to this rule, and seek a further review of the proofs made in this case, we will consider the question of patentable novelty. Is there any patentable novelty in this so-called Glidden barb?

Following the doctrine of the comity of courts and the rule, the court below refrained from passing upon this question, it already having been passed upon by Mr. Justice Brewer, when sitting as a Circuit Court for the Southern District of Iowa, 24 Fed. Rep., 23. But, referring to the opinion in that case, we see the perplexity his Honor was in in reaching a conclusion. And he is much impressed by the opinion of Judges Blodgett and Drummond, 7 Fed. Rep., 906, to which his attention had been called for, he says:

"Judicial investigation of this question has been but limited. Before Judges Blodgett and Drummond one case was tried—the one to which I alluded to a few moments ago—and in that the patentability of Glidden's invention was affirmed. It is true, this particular patent now before me was not the one there considered, but still this express point was decided."

This opinion referred to by Judge Brewer was given on a motion for a rehearing made by the defendant in that case (these Complainants *vs.* Jacob Haish) as to the validity of the re-issued patents, Hunt 6,976, Kelly No. 6,902 and Glidden No. 6,913, considered in a former opinion, in which former opinion *this particular patent*, No. 157,-124, *was* considered and held to be invalid for want of invention, and complainants abided this decision. (Vol. II, 1920).

That defendant's counsel did not cite the former opinion shows either one of two things, a poor preparation and presentation of their case, or the intended omission for collusive purposes.

The barb itself is simply a piece of wire coiled, leaving the ends project in opposite directions. These spurs are cut square off, as is shown in the drawings, and the specifications state nothing different. The complainants have tried to prove by various witnesses the value of a *dull point*, when, in fact, it is not shown that they ever manufactured a pound of that kind of wire for the market. But it is shown that the sharper the barb is the better the wire is considered to be. Complainants' witness, Vice-President of the Washburn & Moen Manufacturing Company. (Rec. Vol. I, 778. Ans. to Q. 16.) A sharp point is not to be considered in the make-up of this barb, the drawings of patent 157,124 not showing it. The coil in wire around another wire, or the making of an eye by coiling wire for receiving or holding another wire or substance, is as old as the drawing of wire itself. Every old wire bird cage in the country has it. The coil in the wire rim of tin pails, and other tin articles, for receiving the bail, the wire coil in door locks, door springs, the old-fashioned clothes pin, show it, and in nature the tendril of the grape, and of every other clinging vine suggests it. With all these and, in the matter of fences. with the invention of the Kelly twisted barb-wire fence before a wire mechanic and Kelly's other patent, together with the dozen or more barb wires presented in this record, how much *inventive* genius and originality would it require to extend the ends of the wrapping wire E in the drawings of E. C. Patterson, patent No. 79,854, July 14th, 1868 (Rec., Vol. II, 1994), so as to form this Glidden barb? It is assuming much to call it even mechanical skill. Down here in the Smithsonian Institute are to be seen several dozen of Glidden barbs, in form, which date back to the bronze age, which was not later than 900 B. C. They consist of bronze wires coiled at their middle point, once, twice and some three times around; one of the prongs is

sharpened at the end and the other flattened out according to some design, and is hooked at the end to catch down the other point, something on the plan of the modern safety pin. And that last-named article antedates the Glidden barb a dozen years. True, the coil in these latter instances is not for the *purpose* of forming an eye, but the eye is there and the simplicity of running a wire through it or of making it about a wire, requires not even ordinary skill much less mechanical skill. Because a man can drive stakes with an ax made to chop wood, he can not for that reason get it patented.

In Stanley Wks. *vs.* Sargent, 8 Blatchford, 346, it is held that:

"Utility is not an infallible test of originality. The patent law requires a thing to be new as well as useful in order to entitle it to the protection of the statute. To be new in the sense of the act it must be the product of original thought or inventive skill, and not a mere formal or mechanical change of what is old and well known."

The purpose of the law and constitution in regard to patents is clearly set out in the case of Thompson *vs.* Boisselier, 114 U. S., 1, where your Honors say:

"The provision of the constitution (Art. I, Sec. 8, Subd. 8), in that Congress shall have power to promote the progress of science and useful arts by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries. The beneficiary must be an inventor and he must have made a discovery. The statute has always carried out this idea. * * * In the act of July 8, 1870, 16 Stat., 201, Sec. 24, the patentee was required to be a person who had invented or discovered any new and useful art, machine, manufacture, or composition of matter, or any new and useful improvement thereof, and that language is reproduced in Sec. 4886, Rev. Stat. So it is not enough that a thing shall be new in the sense that in the shape or form in which it is produced shall not have been before known, and that it shall

be useful, but it must, under the constitution and the statute, amount to an invention or discovery."

And the cases there cited:

Vinton *vs.* Hamilton, 104 U. S., 485.

Hall *vs.* Macneale, 107 *id.*, 90.

Atlantic Works *vs.* Brady *id.*, 192.

Hollister *vs.* Benedict Mfg. Co., 113 *id.*, 59.

And since these opinions were written, Miller *vs.* Force, 115 *id.*, 22; Yale Lock Mfg. Co. *vs.* Greenleaf. 117 *id.*, 554.

Everything patentable in the Glidden combination was shown in the first Kelly patent, and the actions of the complainants themselves bear us out in the statement. According to the testimony of their witness, A. K. Stiles, late president of the Thorn Wire Hedge Company (Vol. I, 401), these complainants bought the Kelly patents of that company, and the consideration of the purchase allowed the said Thorn Wire Hedge Company to manufacture what they desired free of royalty, and further they paid said Thorn Wire Hedge Company a royalty of 37½ cents on every hundred pounds which these complainants made of their own, and on all the wire that was manufactured by all of their licenses, which it seems were fifty-two in number. In December, 1878, on a pretense of said Thorn Wire Hedge Company taking a license from the Washburn & Moen Manufacturing Company, under the Glidden patents, the royalty was reduced to 25 cents per hundred pounds. This royalty was finally reduced to 5 cents per hundred pounds. Mr. Washburn, of complainants, testifies (Vol. I, 775), that the tonnage per annum of all their licensees is about 173,000 tons and their own output 20,000 tons annually, making a total annual tonnage of 193,000 tons by these complainants and their licensees. Deducting the 3,000 tons which Mr. Stiles testified was the annual output of the Thorn Wire Hedge Company, and it leaves a grand total of 190,000 tons upon

sharpened at the end and the other flattened out according to some design, and is hooked at the end to catch down the other point, something on the plan of the modern safety pin. And that last-named article antedates the Glidden barb a dozen years. True, the coil in these latter instances is not for the *purpose* of forming an eye, but the eye is there and the simplicity of running a wire through it or of making it about a wire, requires not even ordinary skill much less mechanical skill. Because a man can drive stakes with an ax made to chop wood, he can not for that reason get it patented.

In Stanley Wks. *vs.* Sargent, 8 Blatchford, 346, it is held that:

"Utility is not an infallible test of originality. The patent law requires a thing to be new as well as useful in order to entitle it to the protection of the statute. To be new in the sense of the act it must be the product of original thought or inventive skill, and not a mere formal or mechanical change of what is old and well known."

The purpose of the law and constitution in regard to patents is clearly set out in the case of Thompson *vs.* Boisselier, 114 U. S., 1, where your Honors say:

"The provision of the constitution (Art. I, Sec. 8, Subd. 8), in that Congress shall have power to promote the progress of science and useful arts by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries. The beneficiary must be an inventor and he must have made a discovery. The statute has always carried out this idea. * * * In the act of July 8, 1870, 16 Stat., 201, Sec. 24, the patentee was required to be a person who had invented or discovered any new and useful art, machine, manufacture, or composition of matter, or any new and useful improvement thereof, and that language is reproduced in Sec. 4886, Rev. Stat. So it is not enough that a thing shall be new in the sense that in the shape or form in which it is produced shall not have been before known, and that it shall

be useful, but it must, under the constitution and the statute, amount to an invention or discovery."

And the cases there cited:

Vinton *vs.* Hamilton, 104 U. S., 485.

Hall *vs.* Macneale, 107 *id.*, 90.

Atlantic Works *vs.* Brady *id.*, 192.

Hollister *vs.* Benedict Mfg. Co., 113 *id.*, 59.

And since these opinions were written, Miller *vs.* Force, 115 *id.*, 22; Yale Lock Mfg. Co. *vs.* Greenleaf. 117 *id.*, 554.

Everything patentable in the Glidden combination was shown in the first Kelly patent, and the actions of the complainants themselves bear us out in the statement. According to the testimony of their witness, A. K. Stiles, late president of the Thorn Wire Hedge Company (Vol. I, 401), these complainants bought the Kelly patents of that company, and the consideration of the purchase allowed the said Thorn Wire Hedge Company to manufacture what they desired free of royalty, and further they paid said Thorn Wire Hedge Company a royalty of 37½ cents on every hundred pounds which these complainants made of their own, and on all the wire that was manufactured by all of their licenses, which it seems were fifty-two in number. In December, 1878, on a pretense of said Thorn Wire Hedge Company taking a license from the Washburn & Moen Manufacturing Company, under the Glidden patents, the royalty was reduced to 25 cents per hundred pounds. This royalty was finally reduced to 5 cents per hundred pounds. Mr. Washburn, of complainants, testifies (Vol. I, 775), that the tonnage per annum of all their licensees is about 173,000 tons and their own output 20,000 tons annually, making a total annual tonnage of 193,000 tons by these complainants and their licensees. Deducting the 3,000 tons which Mr. Stiles testified was the annual output of the Thorn Wire Hedge Company, and it leaves a grand total of 190,000 tons upon

which complainants paid royalty annually. This, at 25 cents per hundred pounds, or $5 per ton, amounts to $950,000 per annum. The Kelly patent did not expire until February, 1885, so for nine years they pay this enormous royalty. Let us take the production of the the complainants, which Mr. Washburn estimated at 20,000 tons annually, for the life of the Kelly patent; this would amount to 180,000 tons. He also estimated that the complainants manufactured about one-third of all manufactured. We will say they manufactured one-third; we have them paying royalty on 640,000 tons, at $5 per ton, or $3,200,000; but cutting it down half, and we have $1,600,000 which these complainants paid in royalty for that Kelly patent, which all through their testimony they have tried to make out as worthless, while their testimony also shows they never manufactured a foot of Kelly wire. Why expend this vast sum for a nothing? Their actions speak for them. The Kelly patent was the one thing needful in the barbed-wire business. It was the staff that supported the giant monopoly. On this they brought their suits before the patents expired. Since then they have intimidated with this Glidden patent, and by threats and notices to dealers and users of barbed wire, as shown by the evidence, and by demands of royalty from agents, and suing them while suits with their principals are pending (see No. 129, No. 130, October Term, 1891, submitted herewith), not willing to let the law take its course. The Kelly patent contained every element of utility that a barbed-wire fence can have. Glidden was but an imitator, supplying only in the place of the Kelly barb his coil barb, which, from the state of the art, shows no invention, and, if it did, was not Glidden's invention, but was in use many years. The defendants have proven by many witnesses that this same barb had been made and was in practical use on at least five distinct fences, on

some of them fifteen years, before Glidden made application for his first patent.

THE DELHI FAIR FENCE.

The first of these the Delhi Fair fence. The evidence produced by the defendants shows that at a county fair held at Delhi, Delaware county, Iowa, between the years 1858 and 1861, or shortly before the war, a man by the name of Morley exhibited at the fair a barbed wire fence. The wire was single and the barbs short pieces of wire twisted two or three times about it and the ends left projecting at right angles to the wire about three-quarters of an inch. We will set out at some length the testimony of the witnesses in regard to this fence, because in the case relied on by complainants, wherein Mr. Justice Brewer sat as the court below, he says there was nothing to show how the fence was constructed nor who exhibited it, whence he came, or whither he went.

H. L. Bates (Rec., Vol. II, 1321) testifies he is a blacksmith; attended the fair at Delhi, Delaware county, Iowa, he thinks in 1860; saw a panel of wire fence that belonged to Alvin Morley fastened to a tree and post, with stake near middle; were three wires, the top one barbed and a few barbs on second wire; was put up second day of the fair, and he helped him put it up. The wire for barbs was heated with wood fire, so they would bend easily. Barbs were cut with a cold chisel; thinks afterward filed or ground so that they were sharp. The wires were bent twice or thrice, not certain, by means of tools. (Q. 23.) "I made them myself." (Q. 24.) "It was two pieces of iron five or six inches long, with a shoulder cut in one end of them and hole through them." Afterward he made him a pair of shears to cut the barbs with; and

upon request of defendants' attorney, at a recess, he makes a set of the tools, and afterward in court puts on barbs with them. (The irons and two pieces of wire made by witness were introduced as evidence, and are here as H. L. Bates' exhibits "A," " B," and " C.") Made barbs for Morley at times for four or five years, and once made about thirty feet of wire for his patent cowpen.

He also testifies that the piece of wire identified as a part of the wire fence exhibited at Delhi fair by D. S. Potter, marked " Delhi Fair Wire Exhibit." (Q. 62.) " If it is not a piece of the same wire it is so like it that I can not tell the difference. I can't swear it is the same wire, but it is as near like it as I could go to work and make a piece now."

Stephen Potter testifies (Vol. II, 1222) that he attended the Delhi fair in 1859 or 1860; saw the Morley fence—were three or four wires with barbs on the top wire—barbs were wound around the wire, thinks twice, and projected out from one-half to three-quarters of an inch; asked Morley to give him a piece of the wire, which he did, and took it home; talked with his wife about its liability to injure stock; hung it for a while in a summer kitchen, and afterward put it into an old trunk full of relics and keepsakes, from whence, upon request, he produces it in court and it is identified as the wire given him by Alvin Morley and marked " Delhi Fair Wire Exhibit," and as such is before this court.

George Underwood saw the fence, too (Vol. I, 1061), was about four feet high; one end fastened to a tree, the other to a post. The top wire was barbed, the barbs smooth wire wrapped twice or three times around and cut off; was a lad of eight or nine years.

(X Int. 111.) Were you taking a great interest in barb wire fences at that time?

Answer. Not so much as the wire did in me.

(X Int. 112.) What do mean by that?

Answer. I carry a couple of scars which I received from the effects of it.

(X Int. 113.) What were you doing that you got marked?

Answer. I was wrestling and playing with some other boys.

(X Int. 114.) How and where were you scarred?

Answer. I was thrown against the barb-wire fence and cut a gash under my right eye—right here (showing a scar)—and another here about an inch below and about the point of the cheek bone (showing scar). This was certainly positive proof to the boy that there was a fence such as described.

T. W. Robinson attended the fair at Delhi in 1859 or 1860 (Vol. II, 1307); was assistant marshal, and rode a dapple-gray horse. Saw wires stretched on posts; won't say how many; one had what they called "snags" on it, which consisted of a piece of wire twisted a couple of times around, with a "kind of blunt sharp to them." Hitched his horse to one of the posts for a few moments, and when he went after him he had snagged his under lip, and blood was all over his breast. Remembers, on cross-examination, of seeing Morley near the fence when he tied his horse.

John Dubois (Vol. II, 1498), a farmer in Delaware county, Iowa, enlisted August, 1862; prior to that, he thinks 1859, he attended a Delaware county fair at Delhi. Saw a wire fence; larger wire than at present, barbs same size as wire; were just wound around the main wire and stood crossways to the length of it. (Int. 15.) "I saw Mr. Morley, a man we used to call 'Crazy Morley;' I saw him with it; he brought it to my house the night before. Stayed at my house the night he came down." Morley showed and explained it to him at his house; was the first he ever saw; thought it would be rough on stock.

E. Healey (Vol. I, 1088), exhibited a McCormick reaper

at a fair at Delhi about 1861, or the last fair held there. Saw the fence; was plain black wire, with barbs of wire twisted around twice; saw it several times, and examined it closely once; was interested in fences; don't remember who exhibited it.

N. S. Hale attended the fair at Delhi before the war. (Vol. I, 1090.) Went past the fence; was wire strung on posts, with some barb on them; thinks smaller wire twisted about the main wire, but not certain.

Enos Hamblin, a carpenter (Vol. I, 1124), exhibited a two-horse wagon at Delhi Fair; thinks 1859 was the year. Saw a panel of wire fence; three strands of wire; top one barbed by wire twisted about it; barbs about a foot apart.

Oscar Welman, a farmer (Vol I, 1133), saw the fence at the county fair at Delhi some twenty-five or twenty-seven years ago, before the war; was three strands; the top one barbed; looked like fences where staples are twisted on. Fairs of Delaware county, Iowa, were held at Delhi prior to the war; after that at Manchester. Panel of fence about fifteen or sixteen feet long.

Joel Bailey, formerly county judge of Delaware county (Vol. I, 1150), saw a panel of barb-wire fence at the Delhi Fair, before the fairs were removed to Manchester; barbs were longer and more crude than barbs of to-day; thinks they were made of smaller wire twisted around the main wire.

Aaron Sullivan (Vol. II, 1161) testifies fairs held at Delhi before the war and at Manchester since. Saw a barb-wire fence at Delhi fair, if not mistaken in the date, in 1858. It was strung on posts; the top wire had prickers or barbs on it. There was a slat, probably not wider than three fingers, hung under the top wire and was attached to the top wires by smaller wires. (Ans. 10 Int). "They (barbs) were wire, pointed sharp, twisted once, I think, around the wire. The barbs were little over an

inch long." Panel some 12 to 20 feet long; talked with the exhibitor about fence. He said slat served as a sight to turn away stock from the fence so they would not run against it; it was something new to him.

David Connor, farmer (Vol. II, 1169). First saw barbed-wire fence at the Delhi fair; fairs were held there 1858, 1859, 1860. "Not such barbs as we use nowadays at all. But they were just wires bent around smooth wire and sharpened and stuck out so—stuck out an inch and a-half or two inches." Thinks it was 1859. "Was the year that William Acres' horse, that he bought in New York, trotted on the grounds."

J. H. Burrington, farmer (Vol. II, 1178) Run one of the stands at the fair; had his attention first attracted to the fence by some fellows making fun by trying to drive a bull, which one Thomas Wragg was riding, over the fence; afterwards went up and examined the fence and found it to consist of wires, one end fastened to small tree and the other to posts; the wire was soomth except one, the top one, and that had barbs made of wire twisted around and cut off slanting. The ends of the barbs stuck out about inch and a-half; fair held at Stone's place before the war.

Col. J. H. Peters, attorney by profession (Vol II, 1212). At the last fair he attended at Delhi prior to his enlistment saw a panel of barbed-wire fence. The barbs were at that time called "prickers" by a friend with him; can not describe the barbs minutely; my recollection is they were short wires twisted once or twice about the main wire, and cut off so as to leave sharp points; saw the incident of Tommy Wragg riding the bull; was a member of the convention that framed the present constitution of Iowa.

Anson Sheldon, a wealthy farmer (Vol. II, 1264), attended an agricultural fair at Delhi before 1861. (Ans.

Int. 15.) "I saw some wire stretched from a tree to two posts—one at the end, the other at the middle. As near as I can recollect there was three wires; there was a pole or rail on top, and on the wires there was some wires wound round—twice round—points running out opposite each other or nearly so." Some called them prickers, others snags; are called barbs now.

Newman S. Preston, farmer, saw Morley exhibiting a barb-wire fence at Delhi fair (Vol. II, 1278) before 1861, and describes it; was a policeman on the fair grounds. In regard to "Delhi Fair Wire Exhibit," when shown him, says (Int. 31): "Well, sir, if it is not some of the same wire it is some other made so near like it that I can't tell the difference."

A. A. Strong, a retired farmer (Vol. II, 1384), was at one fair at Delhi before the war; saw barb-wire fence and describes it.

So was James Clugston, and he saw it. (Vol. II, 1393).

H. C. Spangler was at the fair and saw the fence.

John Luchinbill saw Alvin Morley exhibiting his fence at the Delhi fair. (Vol. II, 1445).

Rollin Lewis attended the fair two different years (Vol. II, 1461); saw barbed-wire fence and describes it; tells why it was impressed on his memory.

S. S. Squires (Vol. II, 1472) attended the Delaware County fair held at Delhi between 1858 and 1860; saw a barbed-wire fence and describes it.

Salem Turner (Vol. II, 1518) saw both Morley and Bates (who testifies he helped Morley put up the fence) at the Delhi fair; was near the fence, and John Moak, being intoxicated, ran against a "twister" laid up on one of the posts, and he (Turner) picked it up and examined it; describes it. This is brought out on cross-examination. Saw Judge Doolittle near it, and names others who were at the fair.

We have been thus particular to specify what each of the witness saw at the Delhi fair, because in the decision in the case before Judge Brewer it was said it was not shown who exhibited the fence, nor was the evidence sufficient to show how it was constructed, and was dropped out of the case as not having been proven.

This evidence supplies, we think, what was wanting in the case mentioned.

The exhibitor of the fence is shown to have been one Alvin Morley, a man well known in Delaware County, Iowa.

The construction of the fence is shown to have been a plain wire fence, with short pieces of wire wrapped, most of the witnesses say, twice around the same wire, with projecting, sharp-pointed ends, called variously snags, prickers, prongs, daggers, etc., and similar to barbs now in use.

George A. Underwood's face was lacerated by the barbs, and he shows the scars; Marshal Robinson's horse was injured by them; Stephen Potter produces a piece of the wire; Morley had a roll of the wire at the house of John Dubois the night before the fair and shows him how it is made. And finally H. L. Bates assisted Morley in putting up the fence at the fair; had made the tools with which the barbs were twisted on, and at various times after the fair put prickers on wires for Morley.

And this man Morley used this kind of barbed wire in other places.

MORLEY'S BARBED WIRE AT MILL.

D. I. Johnson testifies (Vol. II, 1372, Ans. Int. 11): "I saw him (Morley) put what I called barbs on wire, or prickers, I should say." (Ans. 12.) "Down here at his mill." (Ans. 13.) "It must have been 1859." (Ans. 15.) "He took a piece of smooth wire and tied one end to a

tree and one end to his wagon, and then tightened it; then he went to work and put on these prickers." Were made of same size wire he was using. He had a couple of little machines ten inches or a foot long; he had little short pieces of wire, and he put one of these on each end of the short piece of wire, and turned one one way and the other the other way around the wire he had tightened up; turned the prickers twice around. Machines were pieces of iron with holes through the end. Witness is shown "Delhi Fair Wire Exhibit" and asked how it compared with that Morley made at the mill. (Ans. 48.) "It was coarse wire like that, but my impresssion is it was a coarser wire, but the barbs were put on in a coarse manner like that."

Witness further says he saw some of the same kind of wire then in use—two strands of it—around a calf pen Morley had.

Mr. Eldridge (Vol. II, 1855) testifies (Int. 4 to 8): Knew Alvin Morley well; lived half a mile from him at his mill. "I have seen him have wire there on his yard, where he guarded his oxen and cow. Well, sir, I can't tell you what it was on the wire, though I know it was some kind of barb to turn stock. I did not notice then. He used to be at my place a good deal, and talked about making a barbed wire to turn stock." Was always talking about getting up barbed wire and other things. (Int. 9.)

Jonathan Luchinbill (Vol. II, 1445), who also testified in regard to the fair fence, says (Int. 17.): "The old man (Morley) had a saw-mill down here. I can't state exactly where it was, tho' it was on the Maquoketa. The old man came and staid all night with me. The next morning I took him home to his saw mill. I saw the same wire there what I saw at the fair."

Samuel R. Young (Vol. II, 1453) knew Morley well;

first saw barbed wire at Morley's mill on cow-pen; was 1862 or little later. (Int. 12). "I saw some wire stretched around some posts that he had set up there. He had wire the same size twisted around the other wire; probably the barbs were a foot apart, or maybe more. Well, I have seen him carry some of that wire around to show to the neighbors. Now, these barbs that were on it were probably an inch long."

(Int. 25.) "He (Morley) got it up. I don't remember of his saying who invented it or anything of the kind, but he got it up."

Ichabod McDonald testifies (Vol. II, 1486.) He knew Morley more than twenty-five years ago; at that time saw barb wire for first time at Morley's mill on a cow-yard. (Ans. 9.) "It (barb) was a smooth wire, and it was twisted around it and stuck out perhaps three-quarters of an inch or less; was quite a pricker, I thought at the time."

H. L. Bates testifies that Morley had a saw mill on the Maquoketa River, and that Morley had a cow pasture or pen on wheels, with barbed wire on it. The cow was put in a pen, with her neck in a stanchion, and she fed outside, and the pen moved as she moved. It was made in 1861 or 1862. (Vol. II, 1321.)

And it is shown that Morley had this wire in use upon other portions of his premises. The stony portions of his farm 3½ miles east of Manchester were fenced over with this kind of wire.

Charles Towner testifies (Vol. II, 1430) was with my father doing some breaking for Alvin Morley 3½ miles east of Manchester on the Dyersville road, near what is called the Ben Sheldon farm. We broke twenty acres and were two weeks or more at it. This was in 1861 or 1862.

There was a fence on the east side; was built of wire.

There might have been some of it built of boards of slabs. There were stony points; and over these stony points the fence was made of wire. (Ans. Q. 21). "Yes, I see him (Morley) working with the fence. My father says, 'I wonder what Morley is doing.' He went over there, and I went with him. He had pieces of wire and two irons and was twisting them around the other wire on the fence." His father asked Morley what he called them and he said prickers to keep out the cattle. Called barbs nowadays. Ends were sharp as if cut kind of endways and stood out from the wire.

.P S. French (Vol. II, 1438) returned from California in fall of 1861, knew Mr. Morley after that, and saw barbed wire on the fence running east and west out by Chas. Grommonds'. Thinks there were two wires and both barbed. This fence was on land understood to be-belong to Morley.

Stephen J. Edwards testifies (Vol. II, 1441): He was acquainted with Alvin Morley, got acquainted in 1856 or 1857, was acquainted for six or seven years. Saw piece of wire fence on east line of land belonging to Morley 3½ miles east of Manchester. Recollects of seeing pieces of wire on the wire fence. When asked how these pieces of wire would compare with modern barbs says: (Ans. 14). "That portion of the fence was No. 8 or 9 wire and would compare favorably with the barbs now in general use. Those pieces of wire that I spoke of were of the same size as the other wire, being No. 8 or 9." (Ans. 18). "I had been looking up some stray stock. There was a storm came up and I was driven into Mr. Morley's shanty by the rain. Mr. Morley spoke of having some improvement in wire fence. My curiosity was to see what that improvement was. On my return home I went quite a little distance out of my way to see the piece he described or spoke of."

John Lillibridge (Vol. II, 1478) knew Morley from five to seven years; was before the war. Saw wire fence that Morley had around a hog-lot on land east of Chas. Grommonds' farm. Saw Morley put on the barbs. (Ans. Q. 11). "Well, he called it a barb. He cut them off. I think he cut them off with a cold chisel; then he put them around the wire. Then I think he had two pieces of iron, and each of those pieces had a hole in them; and I think he put these here little irons, one of them on each end; and he done just so, and squeezed them right around there; and these wires were tight and would stay right there." Barbs projected about a half inch.

(Ans. 16). "He said if I would hitch my horses and get out and come into his shop he would show me how he made his wire fence. I did hitch my horses, went into his shop, and there went through the operation of putting on the barb, he called it." Shop was under his house—a cellar. Saw some wire on Morley's traveling cow-pen which he had across the road. Same kind of wire, barbed. Describes cow-pen. (Same was patented by Morley and is made part of record by complainants, Vol. II, 1958.)

Ichabod McDonald saw barbed wire same as at his sawmill on the land now owned by Ben Sheldon. (Vol. II, 1487.) (Ans. 22.) "It was there, I should judge, to keep the cattle out of the field. I can't tell how much there was. It was patches where the old board fence had given out. There was a couple of places I noticed.

A. R. Loomis (Vol. II, 1489) at one time saw Morley in his store exhibiting a piece of wire which he claimed would be good for fences. (Ans. 7.) My idea is that it was a short piece of wire not more than a foot long, maybe not that, with another piece of wire bent around it, but in what shape it was bent or cut I could not say.

Stephen Potter testifies (Vol. II, 1222) that Morley had a piece of land about a half mile from my land, on

which he had a wire fence he put barbs on. On the east this farm adjoined on the farm of Ben Sheldon. There were some three or four places that had barbs on. (Ans. 35) "He put a kind of a board fence through on one part of it, and there was two or three stony places on which he could not set posts very well. He put on those barbs. There was wire and barbs on. It was on the east side of the Morley farm." Stony places near the middle of east line. Barbs were same as those on the Delhi fair fence. Saw this fence on the farm some years after Delhi fence.

Ben Sheldon testifies (Vol. II, 1253) bought the land east of Alvin Morley in 1865. At that time Morley's land was improved, and on east line there was a fence. (Ans. 11.) "Some of it was boards, some of it was rails, some poles, and some wire." (Ans. 13.) "There was some rocky places where there was wire. I think there was three." There was wire wound around the wires and cut off; would now be called "barbs." Ends were cut slanting and stood out from the main wire from one-half to three-quarters of an inch, perhaps more. Saw it in 1866, May or June; was breaking his own land then. Fence was taken away in 1866 and 1867; was not on line, and when I fenced there was no further use for it. Afterwards, in 1868, he ran on to a piece of this wire with the barbs on with his reaper and broke a section out of his sickle. Barbs looked very similar to those on "Delhi Fair Wire Exhibit" which was shown him. Mentions other inventions of Morley's showed him—the traveling cow-pen, the face protector for cold weather, a wagon attachment whereby a team could be turned loose to feed while hitched up.

J. B. Satterlee, clerk of courts (Vol. II, 1423), saw barbed wire on this line fence between Morley's 80 and the Sheldon 80. (Ans. 12.) "I saw parts of a fence along what I

supposed to be the east line of the Morley land that was made of wire, two or three parts over ledgy or stony ground, and I think there was a portion of the north fence on the same land that was made of wire. My recollection is that this was nineteen years ago this season; perhaps, nineteen years ago in August." (Ans 14.) "The main portion of the fence was made of posts and boards cut from logs nearly all lengths, and cut without squaring the logs. The posts were set to somewhat accommodate the boards. Very many times the boards did not meet or break jointly on the posts, and where the ground appeared to be too rocky to set posts there was wire drawn across." (Ans. 16.) "They (barbs) were twisted around the wire in some manner so as to leave two sharp points of considerable length." Tore his clothing on the fence. Were three or four strands of wire on the fence.

There are thirty-six witnesses who testify to having seen this Morley barbed wire at these several places, and their reliability and standing leaves the fact, that this man Alvin Morley, between the years 1858 and 1866, made and used barbed wire for fencing with the barbs made of wire coiled about the main wire, proven beyond a question.

They are farmers, mechanics, and tradesmen, all living in Delaware county, Iowa. They have no interest in the subject in dispute. Many of them do not know more than one or two of the defendants. The number of these witnesses renders any attempt on the part of the complainants to impeach their testimony nugatory. A number of witnesses for complainants have testified that they did not see the fence, or could not recollect of seeing the fence. Such evidence is resorted to when all else fails, and then only for base and villainous purposes. Those of them who are of known standing and are entitled to

any credit, only testify that they have no recollection of seeing any of the fences. One of the best qualified to testify in their behalf is J. L. McCreery, of this city, who edited the *Delaware Journal* at Delhi from spring 1859 to 1863. He picked up items for his paper at the Delhi fairs, 1859, 1860, and don't remember seeing barbed-wire fence exhibit there. But (X. Q. 6) he says, in an editorial of his paper introduced by complainants to show that this Morley fence was not mentioned, that he was present the second day of the 1859 fair "only an hour or two," and the testimony of defendants shows that the wire fence was only put up the second day of the fair.

It will be permissable, we presume, to call the court's attention to the manner, too, in which the complainants, through their man Millington, procured their testimony. All but six of their witnesses (and they lived here in the East) were picked up from various places and States and given a free trip to Chicago, and were there entertained and taken around to "do" the town all at complainants' expense, one of them receiving "something over $100" (X. Q. 129, Vol. I, 645, testimony I. U. Butler) for what he knew about barbed wire. Wallace W. Potter was brought from Kansas to give testimony, which, if true, would convict his own father of perjury. (Vol. I, 451.) The defendants refused to cross examine this witness; the reason will appear in testimony of S. Thompson (Vol. II, 1588, Int. 61), also affidavit made by witness of his own accord, which was introduced on trial and is a part of the record. (Vol. II, 2016.) Such methods of procuring testimony, to say the least, savor of fraud.

There were other fences, however, with this same coiled barb which are proven by defendants to have existed a long time prior to the Glidden patent. Three of them in this same county, and no doubt, inspired by these Morley fences.

THE HUTCHINSON FENCE.

Joseph Hutchinson, cashies of a bank, testifies (Vol. II, 1865) that from 1868 to 1876 he lived on his father's farm three miles south of Manchester, Delaware county, Iowa. (Int. 5.) Crawford Hutchinson, his cousin, worked on the farm with him prior to November 13th, 1869, when Crawford quit working for them. Before his leaving they together put on barbs on a wire fence over a waterway on the east line fence of the northeast forty of the farm. (Int. 14.) "Defendants Exhibit Hutchinson Barbed Wire" is produced by him. (Int. 20.) "I have a piece here. This came off the water run. This identical piece of wire I took from this water run through Crawford Hutchinson's instructions, or, rather, through remarks that had passed between us." * *

Crawford Hutchinson testifies (Vol. II, 1859) (Int. 3): "Yes, I have worked on several farms. First on Henry Hutchinson's. I did my first work on that in the year 1864 and worked on that farm at intervals until September, 1869."

Int. 4. During the time you were at work on Henry Hutchinson's farm state if you did any work on a wire fence; and, if so, state fully what the work was.

Ans. I put some of those wire barbs on the fence, on the wires.

Int. 5. Describe the kind of a fence you put the barbs on and the kind of barbs you put on, and how they were put on, for whom and with whom, if any one, the work was done.

Ans. It was a fence with posts and wires strung along on them like the old plain-wire fence used to be. The barbs were a piece of wire, as I remember them now, like a staple, sharp at each end. We put them on with a pair of pinchers, larger and heavier but similar to those used

in ringing hogs. They were put on for Henry Hutchinson. As near as I can recollect it now, Joseph Hutchinson and I worked at it by spells.

Ans. 7. Can not say positively whether it was in 1868 or 1869.

Ans. 8. I know it was not since 1869 for the reason I left Henry Hutchinson in September of 1869 and have not worked for him since. It (fence) was on an east and west fence on south side of the farm.

Ans. 11. The barb was twisted around the wire a single turn, as I remember, and the pinchers by pressing on the handle forced the barb down on to the wire, and that held it in position.

Henry Hutchinson (Vol. II, 1551) is shown defendants' "Hutchinson's Barbed Wire Exhibit," and asked if he had seen any wire similar to it, says (Ans. 7): "I have, on the above enumerated parts of my farm. I had smooth wire formerly upon it, most of which at various times being barbed similar to this said wire now before me." Barbs were first put on in summer of 1869 by his nephew, Crawford Hutchinson, and his son, Joseph Hutchinson. Were put on with nippers. Moved on to the farm himself in 1870 and Crawford was discharged before that. The wire fence was over a hollow that had a creek running through it; also, over what they call the dry run. Creek has changed its bed since then.

Elizabeth Hutchinson corroborates this testimony. (Vol. II, 1547). Looking at exhibit Hutchinson's Barbed Wire, she says: I recognize it as being exactly like that which the boys put on as far back as 1869, and when I first saw it it was when they brought it to the house to show the manner and working of the pinchers and barbs on a piece of wire. I mean by the boys Crawford and Joe, my nephew and my son. And the house I mean the one on Main street, Manchester, Iowa. I believe it was

in 1869; any way as far back, because Crawford left us then, and it was done before he left.

P. H. Warner, a surveyor, testifies (Vol. II, 1599) that he has made an examination of the line between the Hutchinson and Boyland farms and shows where the old creek bed is and where it now runs. (Exhibit P. H. Warner plat, Vol. II, 2016.)

Daniel F. Young (Vol. II, 1609) has known the Hutchinson farm and creek over twenty years. Is shown P. H. Warner plat; says it represents correctly the change in creek bed.

Henry Quintmire (Vol. II, 1788) lived on Hutchinson farm two years and seven months; dug the ditch that changed the course of the creek. Cut the wire off the fence over old creek bed for Joe Hutchinson, which was by him produced and marked Hutchinson Barbed Wire Exhibit. (Ans. 20–27.)

Charles N. Turner (Vol. II, 1617) lived on the Hutchinson farm with his parents from the fall of 1876 until spring of 1882; helped fix the fences. Has been on place recently and found bed of creek changed; runs two or three rods further south. (Q. 10.)

Q. 15. During the five years that you lived with your father on that place what kind of material was the Hutchinson fence made of on his division immediately north of that dividing post?

Ans. It was two or three wires with barbs pinched on to them and a pole or rail, I think, on top.

Examining "Hutchinson Barbed Wire Exhibit." Ans. 17. It looks to me like the same wire that was on the fence when we went there.

Salem Turner also testifies. (Vol. II, 1625.) Lived on Hutchinson farm from 1876 six years. Fixed the Hutchinson fence (Ans. 13) about the first week he moved on the place. Fence for first four or five rods

(Ans. 11) north of Hutchinson's part of line fence between him and Boyland was three wires with barbs on. (Ans. 16.) * * * At that time it (creek) ran north of the division and under Mr. Hutchinson's fence. (Ans. 18.) When I fixed the fence the creek run north of where it is now, I should think probably two rods through Hutchinson's and under his fence; but now I see it runs south of there, through Boyland's fence.

Q. 20. You say in a former answer that you found some barbed wire on Mr. Hutchinson's part of that division fence when you first repaired it. Please take the exhibit handed you, marked "Hutchinson's Barbed Wire Exhibit," and state how this exhibit compares with the barb wire you then saw there.

Ans. Why, I would say it is the same kind of wire.

J. J. Cleveland (Vol. II, 1661) was often along this creek; saw the barbed wire; says the creek has changed its bed.

Samuel R. Young (Vol. II, 1702) corroborates this testimony on the change of the creek bed; as does the testimony of Mrs. Minnie Young. (Vol. II, 1773.)

Defendants have proven in this testimony on the Hutchinson fence that in the year 1869 Crawford Hutchinson and Joseph Hutchinson, respectively son and nephew of Henry Hutchinson, pinched staples to form barbs on to smooth wire fences by means of nippers, said fences being one on the south line of the homestead forty of the Henry Hutchinson farm, the other, across a creek then flowing under the fence of the north half of the east line separating said farm from that of Thos. Boyland, which north half of said fence was the part maintained by Hutchinson. The creek was changed by the digging of a ditch by Henry Quintmire so that it now flows under the south half of said east line fence and the part maintained by Boyland. The sample of wire introduced and

in evidence as "Hutchinson Barb Wire Exhibit" was taken from the fence across the old creek bed.

The making of these barbs of the form and in the manner and at the time testified to is absolutely proven, or an entire family is guilty of the grossest perjury without any motive.

THE WHITE ESTATE FENCE.

C. D. Stone (Vol. I, 1025) testifies. (Ans. 4.) I put barbs on wire fence in Delaware county (Ans. 5) in the spring of 1872. (Ans. 6.) It was a quarter section that was known as belonging to the White Estate. It was smooth wire fence. (Ans. 9.) Used fence staples for barbs. Put them on by putting the staple outside of the wire and hammering them on an iron wedge until the points passed one another; then placed the edge of the wedge between the points and drove on the head of the staple until the points of the staple were spread. (Ans. 10.) The points stood out from the wire; at right angles to the wire you would call it, I think. (Ans. 11.) The staples were made of No. 9 annealed wire.

Ans. 12. I could not state the number I put on. They were put on in five different places on the fence, and from a dozen to forty or fifty in a place. The fence upon which these barbs were put had five wires.

Ans. 15. The barbs were put on the east and south line. On the extreme north end of the east line there were a few there. Perhaps thirty or forty rods south of that there were some. Then there were a few within twenty rods of the southeast corner. They were spread along there, so they might have been called at the corner. There was a few along there and little north of it. What I mean by that is to include what was at the corner and just north as one count. There was only a few at this place and at the corner.

Then there was some on the extreme west end of the south line and a few about the middle of the south string. It might have been a little nearer the west end.

I put them on for George S. Bidwell. Bidwell was using the land for pasture, and he hired me to repair the fence for him. Frank A. Bidwell assisted me in putting the barbs on. In the spring of 1872.

A part of this fence was moved to my place and used to repair the fence. I believe I moved it alone. D. W. Antwerp helped me put it up. It was moved to the Bidwell place, which is now our place, in 1873.

In the testimony of Frank A. Bidwell (Vol. I, 978) we have these facts corroborated. (Int. 14.) It was in the spring of 1871 that my uncle, Chester D. Stone, and myself put on those barbs or staples and slats on to that fence. (Int. 15.) My uncle and myself used the tools, which consisted of slats, staples, a hammer, and an iron wedge. My uncle would put a staple over the wire, a straddle of it, and I would hold the butt end of the iron wedge under one prong of the staple while he, with the hammer, would pound on the other prong until the two were close together; then the sharp end of the wedge was used to spread the prongs apart and make them pass each other; then I held the wedge with the sharp end thereof between the prongs while he, with the hammer, pounded upon the butt of the staple until the prongs were spread so that the ends thereof were nearly opposite; then I held the butt of the wedge underneath the wire while he pounded the staple over the wire and clinched it tight thereto. In cross Int. 8 he tells how he fixes the date.

D. W. Van Antwerp testifies (Vol. I, 1082.) Int. 4. Commenced working for C. D. Stone in spring of 1872. Int. 6. We fixed fences on other places. We fixed fences for cattle pasture. Int. 7. It was an 160 called the Bidwell lot, was southwest of Stone's farm and west of the

poor farm. Int. 11. It was a wire fence. Int. 12. Yes; there was barbs on it in places. Int. 13. I could not say how many; I should think it was five or six panels; if I remember right, it was on the lower wires; it was on a low part of the fence, where the posts kind of heaved out. They (barbs) were common fence staples.

Abram Dubois testifies (Vol. I, 1098) that he knows the land known as the White Estate. Saw barbs on the fence about June, 1872. Fixes the date by his marriage, 1871, and his pasturing his cows on the land the year following. (X.-Int. 1.)

E. M. White (Vol. I, 1138) knows the White Estate west of poor farm. Drove across it in fall of 1873 to shun mud holes (Int. 11). (Int. 14) Was late in the evening; after dark. Int. 15. The man that was with me got out to see where the fence was, and when he got out he said we were right on the fence. Int. 16. When he got into the wagon he gave his team a lick with the whip, and the wagon gave a jerk, and I asked him what is the matter and he said he had hitched the strand of wire to the wagon axle. Int. 18. I saw the wire the next morning; it was wrapped around the hind axle of the wagon. It was about sixty to seventy-five feet in length and it had from one dozen to three dozen barbs on it—what we call barbs now. We called them prods at the time. Int. 19. They (barbs) looked to be short pieces of wire with one turn around a smooth one, with points in opposite directions. The turn held them fast.

J. H. Peters was the attorney of Bidwell at the time he was lessee of the White estate. (Vol. II, 1215, Int. 23.) (Int. 27.) Saw barbs of some kind on the fence at southwest corner; can't give minute details; Bidwell occupied the land until 1872 or 1873; saw the barbs before he abandoned it.

A. O. Wilson testifies (Vol. II, 1209.): He first saw the

fence along the White estate on the 4th or 5th of May, 1873, and saw the barbs; were the first he had seen; fixes the date by his arrival in Iowa.

Albert E. Carter testifies (Vol. II, 1187): Knows the White estate (Int. 9), across road from poor farm; lived about eight rods west and near southwest corner of White estate. And in answer as to whether he knows what kind of fence was on said estate, says (Ans. 12): I do. It was a wire fence—four wires—the greater portion of it smooth. (Ans. 13.) Well, there was portions of it between the posts that there was a stay put at the middle, and there was one portion of it had wires twisted around and pointed at each end. (Ans. 14.) Well, they were wound one turn around the wire. I never heard any particular name for them at that time. (Ans. 16.) I should say they were about an inch long. I did not measure them; they were pointed. (Ans. 17.) I could not tell just tell how many. The place was east of the southwest corner, and another place they were south of the northeast corner. (Ans. 28.) Saw them in 1872. (Ans. 30.) I left there in 1872, and it was the same year I left.

John T. Penn, in his testimony, says (Vol. II, 1201): Knew White estate in 1872. (Int. 6.) It is west from the poor farm and a road separates the poor farm from the White estate. (Int. 8.) It was fenced by a wire fence and the posts were bored and the wires were put through the holes in the posts. I think there were four wires. (Int. 9.) Well, there were some stays put on between the posts on the wires, and in two places that I remember of there was some wire twisted around the wire that composed the fence that I should call barbs. I don't know what else you would call it; prickers, I think; that is all I remember of seeing. (Int. 10.) They (barbs) were a piece of wire pretty near the same size as the wire the

fence was made of; were a piece of wire, perhaps three inches in length, twisted around the main wire of the fence, and the ends of this wire stood diagonal in different directions from this main wire, perhaps three-quarters of an inch in length, and were sharpened at each end. (Int. 16.) Well, there was about, as near as I can recollect now, four or five rods near the southeast corner on the south side, and perhaps as much—or perhaps more—near the southwest corner on the south side. (Int. 18.) It was in this low place in the land. (Int. 19.) The second wire from the top and the second wire from the bottom—the two middle ones—were barbed. (Int. 20.) I saw them in the year 1872, and about May, and at different times during the year. (Int. 21.) I was living on the farm that is now called the Penn farm in the year 1872, and in the year 1873 I went to Delhi and put up a building there, and engaged in the agricultural implement business.

Frederick E. Morgan (Vol. II, 1467) testifies that he worked for William Davis in 1872 or '73, in the spring. There was a wire fence on the east and south sides of the White estate. There were two wires near the middle of the fence that had barbs on a part of the east side. (Int. 13.) They were near the northeast corner and about twenty or thirty rods from the corner, I should think. The barbs were a wire twisted around a smooth wire.

. B. F. Gleason (Vol. II, 1484) worked for Paxton & Seeds, and often drove past this estate on both sides, and frequently drove across it in the years 1869 and 1870; afterward moved to Delhi, and often went to this pasture for his cow. (Int. 11.) I saw fence staples, such as they fasten the wire on with, bent on on the northeast corner of the lot, on what is known as the Shaw corner. (Int. 13.) Well, they were like them (modern barbs), with a twist over so as to hold them fast; saw them in 1871 or 1872.

George A. Underwood (Vol. I, 1063) saw the barbed wire about the White estate; attention called to it by removing a piece of a woman's dress from one of the barbs. On cross-examination he states why he remembers the fence and the barbs (X-Q. 188), and, following.

C. B. Lout also testifies to seeing this estate fence and the barbs thereon. (Vol. I, 1119.)

Here are twelve witnesses who testify to having seen this barbed-wire fence on the White estate several years before the so-called Glidden invention. All of these witnesses, except Bidwell, are residents of Delaware County, Iowa; are well known and respected. They have no interest in this suit; are not related or in any way associated with any of the defendants. Some of them do not know any of them except by sight, and what motive could they have in thus committing perjury by the wholesale? Take the manner of barbing the wire, and it is simple; does not even require the skill of an ordinary mechanic to do it. True the process is somewhat slow compared to methods now, but theirs was a case of necessity, and they put on (by their testimony) not to exceed 250 barbs, and worked at it parts of three days. It made the fence effective against cattle, at least in those parts where put on, and that is what was sought. There can be no question but that this fence was just such as these witnesses have described, and the date when it was done is fixed with absolute certainty by several of the witnesses, and Bidwell abandoned the place as a pasture and moved out of the county in 1873. Whatever was done must have been done prior to that. It was the attempt of Bidwell fencing in what had heretofore been commons that caused the destruction of this fence by those who had been accustomed to use it, or it might stand to-day in proof of its effectiveness and durability.

The complainants, through this agent Millington,

call many witnesses to testify to a negative. A careful analysis of their testimony shows that they simply did not see the barbs.

James Sutton (Vol. I, 173) testifies in their behalf, and there were no barbs. Out of curiosity examined every panel of the fence, and on cross-examination, when asked as to the fence south of the road on the south side of the White estate—he thinks to pay for his trip to Chicago—he must be equally as positive, and swears that the fence was made of pine boards, six nails in each board and knot holes in every panel. He can not tell, however, just where his father's timber is located, drawing wood from which called him past the south line of this land, nor what kind of fence there was across the road along the poor farm. He was between 12 and 15 years old at the time these barbs were put on. The next witness for complainants, J. R. White (Vol. I, 207), helped build the fence described by last witness as pine boards full of knot holes, and swears they were white oak boards and clear stuff. Yet Sutton says he observed this fence as closely as he did the White estate fence. Is such testimony worthy of belief?

Another witness for complainants, Leverett S. Stone (Vol. I, 110), who, with his wife, is given a free trip to Chicago and the freedom of the city at complainants' expense, gives such positive testimony that it needs no other evidence to show its untruthfulness. If true, his father, his brother, and his sister's son are guilty of perjury.

BARBED-WIRE FENCE ON LONG FARM.

Wm. H. Long, a farmer of Oneida Township, Delaware County, Iowa, testifies (Vol. I, 809) that in the summer of 1873 he barbed fence wire on his farm in said township. Built a feed yard on forty in front of the

house and put two wires around it. He put on some barbs; Albert Billings put on some, and witness' son, A. D. Long, put on some. (Int. 10.) It was a two-pointed barb, made of common staple. I had two irons made with a hole in the end of them, like a lead pencil with the lead out. I put the staple over the wire, and then took the two irons and put one on each point of the staple and drew them in opposite directions around the wire. Then I took a hammer and an old flat-iron, and, putting the iron under, I struck it with the hammer. (Ans. 12.) I hung the staple over the wire and drew each of them half way up; that drew the barb around the wire and left the points pointing in opposite directions from the wire. (Ans. 20.) I think (I commenced the work of barbing the fence) the last of May or first of June, 1873. Fixes date by date of deed when he purchased the land in record. (Vol. I, 849.) Produces a piece of the wire barbed in 1873, which is marked defendants' exhibit "A."

A. D. Long (Vol. I, 850), testifies that in the year 1873 he lived with his father, about two miles north of Delaware center, on the farm. In answer as to whether he knows of his father putting on barbs on fence wire, says (Int. 14.): "It was put on a pasture fence on a forty south of the house, or about. The first was about sixty rods; I think about the last of May or first of June, 1873. He had a couple of long irons with holes in the end, and twisted on iron staples, used to fasten wires to posts." (Ans. 6.) Albert Billings and myself (helped father), (Ans. 7.) "It was in the spring after father bought that eighty of land adjoining the old farm on the west. He also bought a Marsh harvester that spring or summer. (Ans. 12.) * * * Besides these long irons used to twist the barbs on with, we had an old broken flat-iron and a

hammer." Produces a piece of the wire barbed in 1873, which is put in evidence as defendants' exhibit "C."

T. N. Sedgwick, a neighbor of Mr. Long's, saw the barbed wire on Long's fence, south of his house, in 1873. (Vol. II, 1359.) Were fence staples put on pretty bunglingly. They went once around the wire. Should call them barbs now.

James Clungston (Vol. II, 1393) testifies that (after Morley's) the next wire fence he saw was at Henry Long's in 1872 or '73. (Ans. 25.) It was on a lot across the road from the house, or a yard. (Ans. 26.) Was not a very large yard, and was probably used for yarding cattle. (Ans. 27.) I should think they (barbs) were fence staples twisted around the wire.

Ezra Coats (Vol. I, 1010) testifies that he knew W. H. Long. (Ans 5.) "I have seen barbed-wire fence in the county. Mr. Long barbed the first fence that I saw near the railroad. As near as I can recollect, it was the spring Pitkins moved away." (Ans. 13.) "It was in the fall of 1879. I think (Pitkins moved away)."

George Long testifies that Wm. H. Long is his oldest brother. Remembers seing his brother barb wire. (Ans. 16.) The barbs were put on with tools made for the purpose by a blacksmith in Delaware. The tools resembled an ordinary leather punch, only longer, being something like six or eight inches long. There were holes in the ends of the tools, and were large enough to receive any ordinary fence staple. After the staple was placed over the wire the tools were placed on the ends of the staple, then, by crossing the tools past one another, the staple was wound around the wire. (Ans. 18.) I first saw them (the iron tools) in the blacksmith shop of Charles Moore, in Delaware, but can not give the date. The circumstances were, as I remember them, that Mr. Moore asked me to carry the tools to my brother, and I did so. (Ans.

19.) I think it was the next forenoon (I saw my brother put on barbs). (Ans. 20.) Albert Billings was there. (Ans. 30.) I remember there was afterward a feed yard, containing two or three acres, fenced off in the northwest corner of that forty spoken of, and the west side of that feed yard was fenced in part by this smooth wire containing those barbs that I witnessed the placing on. (Ans. 31.) As I now remember it, the fence was purely smooth wire at first, but afterward I noticed barbs on the wire similar to the ones I saw put on. (Ans. 32.) My memory is not clear on that subject, but I think it was later in the season of the same year.

The testimony of George P. Blaisdell (Vol. I, 883): Knows W. H. Long. (Ans. 4.) I lived within half a mile from him. (Ans. 5.) I heard him tell about making it (barb-wire fence), and saw him at work at it. It was in 1873. It was a part board fence and part wire. (Ans. 10.) It (wire) was on the forty south of his (Long's) house and east of the railroad. (Ans. 24.) It was the next spring after Mr. Pitkin moved away. He moved away in the fall of 1872. It was the same summer that Al. Billings worked for Mr. Long. (Ans. 25.) One thing that makes me remember the time Mr. Pitkin moved was my wife being sick with remittent fever. She was anxious to see Mr. Pitkin's folks getting ready to move. I carried her out of the bedroom into the sitting-room, and laid her on the lounge so she could look out of the door and see them getting ready to move. Another thing, my youngest child was some five or six months old at the time she was sick, and she was born the 14th day of April, 1872.

Albert Billings testifies (Vol. I, 837, Ans. 3.): I came here (Delaware County, Iowa) in the fall of 1872. (Int. 4.) Where did you live or with whom did you live or for whom did you work in 1873? (Ans.) W. H. Long.

Ans. 5. I was to commence the 1st of March. I don't know whether I did or not. (Ans. 6.) I commenced that week any way. (Ans. 8.) I know (of barbed-wire fence being built on W. H. Long's place in 1873). Yes, sir. It was a board fence with barb wire on top of it. It was built along on the east side of the railroad. Mr. Long helped build it for me, and I think his boy helped also. (Ans. 11.) I for one (put on barbs), and I think Mr. Long helped some. (Ans. 17.) It was just across the road from the house. (Ans. 22.) They (barbs) was put on with two irons or steels; I don't know just which they was iron or steel. They had little holes in the end of them, and then we had staples to make the barbs out of. (Ans. 23.) We put the staples over the wire and took the irons and twisted the staples across the wire. (Ans. 26.) We put the flat-iron on the under side and hammered them down tight. Is shown defendants' exhibit "C," and says (Ans. 30.): It looks a great deal like it to me.

The evidence of these witnesses proves that W. H. Long, in the spring of 1873, and long prior to the date of complainants' patent 157,124, made barbed wire and used it for fencing on his farm in Delaware County, Iowa; that the barbs were made of common staples such as are used to fasten fence wire to posts; the staple twisted or coiled about the wire so as to leave the sharp-pointed prongs projecting out at right angles to the wire. The tools were two irons made for the purpose and an old flat-iron and a hammer. The wire is still in use, and two pieces of it are introduced as evidence, and are before your Honors as defendants' exhibits "A" and "C."

These witnesses testify to the same story, and there is no evidence that they are in collusion, either with each other or with the defendants; and it is ridiculous to suppose such a number of persons would or could devise a plan to deceive a court without a motive. Their state-

ments are entitled to full credit as to the things they testify about. Moreover, complainants' witness, George C. Patterson (Vol. I, 145), testifies to the same matter. (Int. 16.) On what part of his farm or upon what fence did Mr. Long first put barbs on fence wire, and how did he put them on? (Ans.) On the south fence. He put them on with two pieces of short iron with holes in the end; twisted the barb and fastened it on with a hammer and flat-iron.

Int. 22. What year was it that you saw Mr. Long put those barbs on his south eighty?

Ans. '74.

Cross Int. 43. What year did you build your fence along the railroad track?

Ans. I think it was '74. I moved the fence down to the railroad track to enlarge the pasture. X. Q. 50. Well, now, how soon after the cars commenced running do you think it was 'till you moved that fence to the railroad grounds; was it the same season or the next? Ans. I think it was the next.

X. Q. 51. Now if you think it was 1874 that you moved your fence down, as you have stated, it must have been the same year that you saw Mr. Long putting barbs on the south fence of his south eighty, wasn't it, for you have testified that it was in 1874, as I understood? Ans. I didn't say that I moved the fence in '74. I think it was '75 I moved the fence. X. Q. 52. Well, was it the year after you saw Mr. Long putting those staples on with those irons you have testified about; that is, I mean did you move the fence the year after you saw Mr. Long put on the staples? Ans. Yes.

X. Q. 96. What year did the cars commence running on the railroad that ran through your land and Mr. Long's.

Ans. I don't remember; must have been '72 or '73.

Ans., X. Q. 102. I stated the cars commenced to run in '72 or '3—I think that is the way I stated it—and moved the fence about a year from the time the cars commenced running. I could not state the month, and I don't believe you could, either.

X. Q. 108. Didn't you know that you was expected to testify that barbs were first put on wire by Mr. Long in 1874? Ans. I expected so.

X. Q. 109. When was you first told that you was expected so to testify? Ans. Last spring.

X. Q. 110. Who by? Ans. Mr. J. W. Millington.

The testimony of this witness estops complainants from demanding further proof of the Long barb wire. As to the time, then, Paterson first fixes '74 as the time he moved his fence down to the railroad. When he sees that this date will not allow him margin to get the barbing of Long's fence in '74, too, for as he says Long barbed his wire a year before he moved his (Paterson's) fence, he changes the moving of his own fence to 1875. Then again says cars commenced running in '72 or '73, and he moves his fence the year following, this would again put the moving of his fence 1873 or 1874 and according to his testimony, the barbing of the Long fence 1872 or 1873, as it was done a year prior to the moving of his fence. There can be no doubt that the statement of Mr. Long is correct. The testimony of defendants' witnesses in sur-rebuttal shows absolutely that cars commenced running on this railroad in fall of 1872. Paterson states in his testimony that he sold his farm to Charles Moore in 1875 and he left in the spring of 1876. (Int. 23.) Charles Moore testifies when complainants put him on the stand (Vol. I, 309) (X. Q. 49) that Paterson never moved his fence to the railroad. That there was no fence there until he put it there. Who tells the truth? Moore testifies he does not recollect of making those irons for Long,

and don't believe he did, because he says he could not drill the holes in the ends of them unless his life was spared long enough. This statement alone discredits his whole testimony, but he does admit that he could have made them by flattening them out at the end and rolling them into a roll leaving a hole, and he might have made such for Mr. Long. The fact that this Agent Millington went clear to Colorado to see him and gave him this free trip to Chicago seems to give a positiveness to his memory which does not look well compared with his letter introduced by defendants (Vol. I, 312). The other witnesses of complainants are so much at variance with each other we do not think any weight can attach to their testimony.

The last case of prior use is found in Glidden's own neighborhood and is, no doubt, the fence he had reference to, when in his application for a patent he disclaimed "the devices known as spurs or prongs, they having been used before." This barbed wire was on the farm of Charles Beers from 1857 down and was known to many of his neighbors. Glidden, the alleged inventor of barbed wire, lived only a few miles from the Beers farm, although it is not shown that Glidden ever saw the wire, yet it is not improbable that he heard of it; and that, no doubt, was the starting point if not the end of his invention.

(Vol. I, 901.) George R. Beers is a wealthy farmer in De Kalb county, Illinois. Saw barbed wire.

Ans. 7. I think about the year 1857 on my father's farm in the town of Mayfield in the said De Kalb county.

Ans. 9. The wire I saw in 1857 was a single wire with barbs on it. It formed part of the fence around the haystack, on the east side of the barn. The main wire, I should think, was a No. 9 or 10 wire; the barb was a smaller wire. I don't know the exact distance the barbs were apart; probably six inches, probably more. The

barbs were cut sharp or bevelled. They were twisted around the main wire and made fast to it. Ans. 10. The barb was first twisted once around and then extended along the main wire probably a half an inch or an inch, then twisted again in the same way, with the points standing in opposite directions, the points being half an inch or an inch long. They were not even or regular as to that. Ans. 12. I think my brother, E. A. Beers, barbed that wire and put it there.

(Ans. 13.) I saw another and different wire that formed part of the fence between the yard and the haystack. It was on a board fence, between the top and second board, composed of two wires smaller than the first one named, the barbs being fastened to one similar to the first and then twisted together. This is not the same year that I saw the first. (Ans. 14.) I mean the main wires twisted together. (Ans. 16.) During the summer of 1859 I was in California, and came back in December and saw that wire shortly after I came back, being working about the premises.

(Ans. 20.) I should think the barb on the Glidden wire was made a little more compact and a little more uniform in regard to length; otherwise it was about the same (as seen in 1859).

(Int. 22.) How long has Joseph F. Glidden lived in De Kalb County to your knowledge? (Ans.) I do not know how long he has lived in this county. I have known him fifteen or twenty years. I suppose he has lived here a great many years.

(Int. 23.) How far, during the time you have known this Joseph F. Glidden, has he lived from your father's farm, where this twisted wire was that you saw in 1859? (Ans.) About ten miles.

(Ans. 28.) I have seen some of it (wire) barbed. E. A. Beers barbed it, and I have seen him and Wesley Ott-

man working at it together. (Ans. 29.) They had a small pair of pinchers, a vise, an old ax, and a cold chisel. The cold chisel was used to cut the barbs slanting. Sometimes they used the ax for that purpose, setting it on its head and laying the wire across it and striking it with a hammer. For twisting it my brother had an arrangement fixed to the grind-stone, on the opposite side from the handle. It was an attachment for a treadle. The two wires was attached there, and by turning the crank it twisted them together. I never saw them twist any of it together. I saw the arrangement and he explained how he done it. Ans. 31. There was a stick fastened upon the shank of the treadle, probably a couple of feet or more long, and the wire was attached to the ends of this, one wire to one end and one to the other, and by turning the crank the wire was twisted together.

Stephen L Nichols (Vol. I, 913) testifies: Lived two and a half miles from Charles Beers' farm for thirty years. Int. 8. Did you ever see any barb wire on that farm of Charles Beers? And, if so, state when and where you first saw it. Ans. Yes, sir, I have; the past year. I saw a twisted wire there in the year 1860. Ans. 12. Well, there were two wires twisted around, and there was another piece of wire—I should judge about six inches in length—twisted around this wire, and one end projected one way and the other end the other. Int. 17. Was there any circumstance that enables you to remember that there were barbs on that fence when you first saw it; and, if so, what was it? Ans. Yes, sir. I went there to pay a note to Mr. George Beers. He was not at home, and I went down to the yard where Charles Beers was—his father. In getting over the fence I tore my overalls. I asked Mr. Beers what kind of a fence he had. He says: It is what Ed. built and put there to keep the cattle from breaking through. I then looked at the

wire and seen how it was made; then paid him the money that was for George. He said that he would indorse it on a note held against me. That was somewhere about the middle of November, 1860.

Ans. 26. Yes; I do (know Joseph F. Glidden). About thirty-five years. Int. 27. Where has he lived during that time, and how near to this farm of Charles Beers where you saw this twisted wire fence, in 1860? Ans. In De Kalb county, Illinois; between seven and eight miles.

Horatio H. Mason (Vol. I, 920) lives six or seven miles from Charles Beers' farm. Knew him from 1856 to time of his death, 1877. Ans. 6. I did (see barb wire fence on Beers' farm); in November or December, 1857. Ans. 7. A single wire, with what we called barbs now, twisted around the wire, a foot or two apart, and half an inch to an inch long, sharp points. Ans. 8. It was one or two panels long, from twelve to fifteen feet. I did not measure it—just judging—around a straw or hay-stack. In regard to seeing other barb wire on the Beers farm, he says (Ans. 10): I did in March, 1862. Int. 11. What circumstance, if any, makes you fix the date of seeing that second barbed wire in March of 1862? Ans. Collecting a couple of notes from Charles Beers at the farm. Int. 12. Describe the wire that you saw in March, 1862, on the Beers farm. Ans. It was a twisted wire on posts and rail fence; about two or three rods long; barbs twisted around the two wires. Ans. 16. The first time I saw the single wire I did not see any one—the twisted; he (Charles Beers) was at work with an ax repairing fence. He said the twisted wire was something the boys got up. Ans. 20. I am acquainted with him (Joseph F. Glidden) about thirty-four years, and the distance (he lives from Beers' farm) may be about eight or nine or ten miles.

Mason McClellan testifies (Vol. I, 925). Knew Charles

Beers about 22 years; lived not quite a mile from him. Saw barbed wire on his farm in fall, 1857. Int. 7. It was a single wire that I could not tell just how long it was. It was on a cow-yard or stock-yard fence. It might have been three or four rods long. Well, the barb, as near as I can remember, probably was two or three inches apart. The barb was sharp pointed. Ans. 8. It was made of wire. It was wrapped around the single wire. Int. 9. I did (see other barb wire) on a piece of fence near the stock well; that was a twisted wire. Int. 10. (Barb) Similar to what was on the single. Int. 13. I undertook to crawl through it, or under it, and caught my clothes and tore them.

This witness testified in the case of Complainants *vs.* Haish. These complainants afterward (with what purpose other than to intimidate we can not tell), pretending to have lost his testimony, got this witness to sign a paper which purported to be an affidavit containing the same facts as his testimony, and which witness never read; neither did the notary read it to him, but one Offield, who was then acting for those complainants, pretended to read to him. The affidavit is introduced by complainants in this case, and contains matter never read to him. The motive for such night work we would ask your Honors to ascertain, and submit to you the record (Vol. I, 927-931), calling especial attention to the jurat of the notary.

John B. Aurner (Vol. I, 932) testifies that he saw this fence in fall, 1857; caught his hand on the barb. The Beers boys then showed him how they made it.

The complainants called Mr. Adcock, and identified him by a piece of wire from this fence, which they claim was put in the case of Complainants *vs.* Beers, Mr. Adcock being the notary who took the deposition of E. A. Beers. Complainants introduced this wire for the purpose of impeaching it on the ground that it contains what

is known to iron-workers as "cold sheet" and put Malcomb McDonald on the stand (Vol I, 437), who, after five minutes' examination of the exhibit, gives a number of pages of testimony concerning it. We submit the answers given by this witness to cross questions 25, 81, 83, 84, 88, 89, 90, 92, 93, and 96 to show that the attempted proof is a failure. These answers disclose that a cold sheet is a failure to weld. That each billet he rolled from the fag end of a railroad rail of Bessemer steel was made from only one single fag end; two were never put together to make a billet, and this billet was rolled into a rod to be afterwards drawn into wire. That a fag end of a rail had the three parts, viz: the head, the part the car wheels roll on; the base, which rests on the ties, and the stem or web, which is the narrow part of the the rail connecting the head and stem together. The fag end is broken down by compressing the parts together when it is rolled into a rod. That in such a rod, the cold sheet would be along the side or sides of the rod where the upper and lower edges come together and would not extend across the diameter of the rod, and would be the same in wire; that the separation of the two halves of a wire would not occur from this cold sheet unless it tore the metal through the center of the wire where the web of the rail was.

Now take the exhibit (Comps. Ex. Beers' Alleged 1859 Barbed Fence Wire), look at what they call a cold sheet, and it will be seen that the separation is clean and complete through the diameter of the wire, showing a complete separation of the two halves of the wire without breaking or tearing the fibres of the metal along through the center of the wire. This shows conclusively that this wire was never made from the fag end of a railroad rail, and the cold sheet is not such an one as could possibly be produced by making a rod by the Chisholm method. Again, look at answer C. Q., 81. He says steel

breaks square off when broken; the exhibit in hand does not show a square break such as it would be if it was steel, but a stringy break, one part breaking off longer than the other; this shows absolutely it is not steel. These fine spun theories do not count for much. The wire itself contradicts the whole theory of complainants. Defendants called Walter Adams (Vol. II, 1543), W. B. McMillen (Vol. II, 1566), James McDonald (Vol. II, 1564), and D. R. Lewis (Vol. II, 1571), all experts, who testify that this condition called by complainants' witness "cold sheet" has existed as long as they have known iron, etc.—and exists more in iron than in steel. We would call your Honors' attention to D. R. Lewis exhibits No. 1 and 2—the one Bessemer steel wire, the other iron wire known as tinners' bright wire, the latter showing the same "cold sheet" that is seen in complainants' Beers exhibit.

This twisted barb-wire fence was in Glidden's own neighborhood, we do not know that he ever saw it, and it makes no difference if he never did see it, it was there, was known to many of Beers' neighbors, was in use and effective, and so in the other cases of prior use. It does not devolve upon defendants to prove that these prior fences were effective, it being admitted and claimed by complainants that such are *now* so. Coffin *vs.* Ogden, *et al*, 18 Wal., 120, and the case of Gaylord *vs.* Wilder, 10 How., 477, there cited by Mr. Justice Sawyer. Glidden's patent, No. 157,124, produces no new result. The Kelly wire, as shown in Fig. 2 of his February, 1868, patent, will produce every result that Glidden's patent, 157,124, can—even if that patent covers his barb. Complainants' own witnesses substantiate this. Charles F. Washburn, vice-president of complainants, testifies, Vol. I, 778, Ans. 16: * * * "It being the universal testimony of those most conversant with barbed wire that a needle point which will prick and warn the animal before he presses hard

enough against the fencing to do himself injury is absolutely essential." * * * (The Glidden patent, 157,124, shows a dull point.) Kelly's wire has a sharp point and when the wire is stretched on the fence the barbs are rigid. Witness Washburn elaborates on the superiority and growth of the manufacture of this Glidden wire—in face of the competition of dozens of other wires—from 60 tons in 1876 to 44,000 tons in 1886. What kind of competition, pray! In the very same answer (Ans. 11) he tells how they control the barb-wire business with their 52 licenses, virtually the entire trade, and directly afterwards says that their 52 licensees are limited to the production of 173,080 tons annually (X. Q. 39). Is this competition? Put the wealth behind the Kelly wire that the Glidden had and the superiority will soon vanish. Glidden's pretended invention produced no new result and was not patentable; it was only barbed wire for fencing; such was Kelly's. Hotchkiss *vs.* Greenwood, 11 Howard, 248; O'Reiley *vs.* Morse, 15 Howard, 62, Wilson *vs.* Beecher, 2 Blatch, 132. But were there superiority, Glidden can not claim the elements of Kelly. The growth of barbed wire was gradual and all Glidden can claim is what he brings to it, and that is this dull-pointed coiled barb. In Railway Co. *vs.* Sayles, 97 U. S., 556, this rule was laid down and is since followed:

"If the advance toward the thing desired is gradual, and proceeds step by step, so that no one can claim the complete whole, then each is only entitled to the specific form of device which he produces, and every other inventor is entitled to his own specific form so long as it differs from those of his competitors; does not include those. The general principles are so obvious, that they need no argument or illustration to support them."

Glidden's barb is but the substitution of a known

equivalent for Kelly's barb, and not patentable. (Morley Swg. Mch. Co. *vs.* Lancaster, 129 U. S., 263.)

Analyzing the Glidden wire by untwisting it we have a plain wire strand which acts as a binding wire to hold the barbs in place, a wire strand containing the barbs, coiled barbs with dull points wrapped twice around the wire. (Complainants' Exhibit Blunt Spur Wire.)

Doing the same with defendants' wire, we have two wire strands, each having barbs, no unbarbed wire strand, barbs coiled once around the wires with needle points, or, rather, defendants wire is simply two Morley wires twisted together. Applying the law and defendants' wire is no infringement of the Glidden patent, 157,124; even were it a valid patent. It does not contain the element of a wire whose sole duty is to hold the barbs in place. It does not contain the element of a dull point to the barb which the exhibit shows, which the drawings in the patent show (Ans. to Q. 16, Adolph Barthel, Vol. 1, 957), and the value of which complainants, by their testimony, have endeavored to prove. "A combination is always an entirety. In such cases the patentee can not abandon a part and claim the rest; he must stand by the claim as he made it." Schumaker *vs* Cornell, 96 U. S., 549. McCormick *vs.* Talcott, 20 Howard, 402. "A patent for a combination is not infringed by a combination which substantially differs from such patent in any of its parts." McMurray *vs.* Mallory, 111 U. S., 97. Blake *vs.* San Francisco, 113 U. S., 679.

The use of one less element than the whole is not an infringement.

Barrett *vs.* Hall, 1 Mason, 447.

Gould *vs.* Reese, 15 Wallace, 187.

That defendants' wire is effective is not disputed. It will fence 15 rods more to the 100 pounds than this Glidden wire (Ans. 18, Vol. II, 1803, F. S. Griffin). It can be

made from three to four times as rapidly. Both wires are made with machinery that has what is called stop motion. Now the Glidden barbs are wrapped twice and all about one wire. It certainly takes longer to coil a wire twice about another than it does to coil it only once. Defendants have the further advantage in that they barb both wires and can put on two barbs—one on each wire—by a single revolution of the machine (S. Thompson, Int. 40, Vol. II, 1585), while complainants can put on but one. Defendants' wire is stronger. Twisting the barbs all around one wire weakens the wire, and the binding wire is necessarily longer than the barbed one, and when the wire is stretched upon the fence the strain comes almost wholly on the barbed strand which always breaks first.

There are a number of wires better than the Glidden. Whatever there is of apparent superiority in the Glidden wire comes not from its actual value as a wire, but from the monopoly back of it.

We contend, then, that the Glidden patent No. 157,124 is invalid for these reasons—that "the improvement in wire fences" shown therein displays only the expected skill of the makers' calling;

That it is a combination of elements old and well known and not patentable;

That the combination produces no new results;

That all it contains of which the Kelly patent has not an exact similar part is contained in a former patent to Glidden himself, and for that reason is void;

That all it contains of which the Kelly patent has not an exact similar part was old by prior use, it being used and exhibited to many people by Alvin Morley at a fair held in Delhi, Delaware county, Iowa, before 1861, and used by him at his various farms, and exhibited by him thereat, showing people how it was made; and a piece of the wire is before the court, showing the coiled barbs bent

at their middle point about a wire strand, with their points left projecting in opposite directions.

We have also shown that this coiled barb was used on the Hutchinson farm, three miles from Manchester, Iowa, as early as 1869, and a piece of the wire is before the court.

We have shown that it was used on the White estate in 1872, and but for bipeds would have stood to-day against quadrupeds.

We have shown it to have been used by Wm. H. Long in 1873 on a plain wire for fencing his stock yard.

We have shown it to have been in use on the Beers farm in DeKalb county, Illinois, Glidden's immediate neighborhood, on both single wire and a single wire twisted with another strand of plain wire; this is as early as 1857, and a piece of that wire is before the court.

In all over eighty witnesses testify to prior use, all of them respected and reliable citizens whose integrity none can question, none have questioned.

The appellees ask that the decree of the court below be affirmed, with costs.

Respectfully submitted.

D. B. HENDERSON,
Of Counsel for Appellees.

Office Supreme Court U. S.
FILED.
DEC 15 1891
JAMES H. McKENNEY,
CLERK

IN THE

Supreme Court of the United States

OCTOBER TERM, 1891.

WASHBURN & MOEN MANUFACTURING COMPANY AND ISAAC L. ELWOOD, *Appellants,*

vs. — *No.* 128.

THE BEAT 'EM ALL BARBED WIRE COMPANY *et al.*, *Appellees.*

SAME, *Appellants,*

vs. — *No.* 129.

W. W. NORWOOD, *Appellees.*

SAME, *Appellants,*

vs. — *No.* 130.

JOHN D. WILER *et al.*, *Appellees.*

SUPPLEMENTAL BRIEF FOR APPELLEES.

A. S. BLAIR,
Counsel for Appellees.

IN THE

Supreme Court of the United States

OCTOBER TERM, 1891.

WASHBURN & MOEN MANUFACTURING COMPANY AND ISAAC L. ELWOOD, *Appellants,*	
vs.	*No.* 128.
THE BEAT 'EM ALL BARBED WIRE COMPANY *et al.*, *Appellees.*	
SAME, *Appellants,*	
vs.	*No.* 129.
W. W. NORWOOD, *Appellees.*	
SAME, *Appellants,*	
vs.	*No.* 130.
JOHN D. WILER *et al.*, *Appellees.*	

SUPPLEMENTAL BRIEF FOR APPELLEES.

As stated in our original brief, we made and filed same before appellants filed theirs, viz: We filed one by D. B. Henderson Dec. 1, 1891, and another by A. S. Blair

for other defendants Dec. 2, 1891. Appellants did not file theirs until Dec. 7, 1891. We therefore had to anticipate their brief. We find that the only attorney of record in this case for appellees is John R. Bennett, who files a brief of his own, consisting of twelve pages, to which he adds a purported printed stenographic report of B. F. Thurston made before the court below in trial of this case there, and a purported digest of the evidence, made and signed by C. K. Offield, for the court below, but modified for use in this court by printing in the paging of the printed record herein. As Mr. Offield is not a counsel for appellant in this case, nor was said B. F. Thurston in his lifetime a counsel of record herein, we submit that it may not be a proper thing to do to file these arguments herein.

Counsel for appellants on page 6 of his brief, has purported to set out and quote the specification of Joseph F. Glidden for this patent in suit, but in so doing has omitted the following, viz:

"It also consists in the construction and novel arrange-
"ment, in connection with such a twisted fence-wire, and
"its spur-wires, connected and arranged as above de-
"scribed, of a twisting-key or head-piece passing through
"the fence-post, carrying the ends of the fence-wires, and
"serving, when the spurs become loose, to tighten the
"twist of the wires, and thus render them rigid and firm
"in position.

"In the accompanying drawings, the letter B desig-
"nates the fence-posts, the twisted fence-wire connecting
"the same being indicated by the letter A. C represents
"the twisting-key, the shank of which passes through the
"fence-post, and is provided at its end with an eye, *b*, to
"which the fence-wire is attached. The outer end of said
"key is provided with a transverse thumb-piece, *c*, which
"serves for its manipulation, and at the same time, abut-

"ting against the post, forms a shoulder or stop, which pre-
"vents the contraction of the wire from drawing the key
"through its perforation in said post."

Counsel claims that it makes no difference whether the coiled barb is placed all on one, or part on one, and part on another strand, but Mr. Glidden says in his specification: "Each of these (barbs) is formed of a short piece of "wire bent at its middle portion, as at E, around *one only* "of the wire strands."

This shows that the barbs are to be all on *one* wire, and the sole purpose of the other is a binder wire.

He also claims that the degree of sharpness of the barb is immaterial, but says "they must be sharp, because the word spur is used." A spur means a prong, as spur of a tree, mountain, &c. It has no reference to sharpness, but simply a branching off from the main thing. The patentee shows what he means by his drawing, which is a blunt spur.

Under his second division of brief (p. 8) counsel says that Glidden was the inventor of the spur wire, but the record shows that Mr. Glidden himself says he was not. In his application for this patent, he says: "I disclaim the invention of prongs *per se* broadly, as such have been attached to wire fences before." (Record, p. 1969.)

He also in his May 12, 1874, patent, which shows the same kind of a coiled barb, disclaims the invention of the barb. In that specification he uses these words: "I do not claim to have originated the devices known as spurs or prongs on the wires." (Record, p. 1998.) Also in the interference case between him and Merrill he says he does not claim to be the inventor of the barb. (Record, p. 1983, Int. 24.)

Counsel further say that Mr. Glidden did not lose his right to his invention on the barb because he failed to make a separate claim on the barb, and refers to three

authorities. Neither of them sustains his position, while the first—R. R. Co. *vs.* Sayers, 97 U. S., 554—is against him. A claim for a combination of elements does not cover those elements separately.—Evans *vs.* Eaton, 1 Peters C. C., 332. By taking a combination patent, without a specific claim on any one factor of the combination, is an admission, we believe, that the elements are all old.

Under his fourth division of argument counsel say that Glidden's invention was the foundation of the barbed wire industry. This is not so. Complainant Ellwood testified that Jacob Haish commenced to manufacture barbed wire with coiled wire barbs at about the same time the manufacturing of Glidden was commenced. (Record, p. 462, Cross Int. 13.)

I. P. Adams testifies that he as a hardware man, handled the first Glidden wire he ever heard of, in summer of 1875. (Int. 10, 13, 15, Record, 1476.) And he handled and sold the Haish S barbed wire six months before he sold the Glidden, viz., commenced Oct. 26, 1874, to sell Haish wire. (Int. 7, 8, and 9, Record, 1476.) This Haish wire was a wire barb, and he lived in same place as Glidden and complainant Elwood.

C. F. Washburn testifies that the complainants have never made and sold more than one-third of the wire used in this country, and they are the only ones who make the Glidden wire. (Record, p. 781, Int. 43-44.)

Counsel under his sixth division says the second or binder wire in the Kelly structure was only to strengthen the wire; that it did not and could not clamp the thorns in position. Complainants' witness A. K. Stiles testifies otherwise. He says that the second wire does not bind the barb firmly until the wire has been stretched, which is done when the wire is put upon the fence. (Record, 407, Int. 35.) We will show by a model that it does lock the barb.

In Mr. Thurston's argument made before his Hon. Judge Siras, which is filed herein, and also in Mr. Offield's argument, there made and herein filed, it is claimed that if it should be held that any of the several cases of prior uses were satisfactorily proven they would be relegated to abandoned experiments and would not avail us against this Glidden's invention.

The testimony shows in the Morley case that he not only first exhibited his barbed wire at the Delhi Fair in 1858, '59, or '60, but that he put it into practical use on his various farms, where it existed for some years performing the office of fences turning stock, and it was seen on a fence next to B. Sheldon's as late as 1867. (See testimony of Sheldon, Record, 1,252, Int. 10, 11, 12, 17, 19, 34, 39, 40, and 41.) The Long and the Hutchinson fences are still in use, and have been ever since they were made.

The single and double barbed wires on the Beers' fence were put into actual operation on the Charles Beers' farm, and the single one was seen there up to Oct., 1877. (See testimony of Horatio A. Mason, Record 921, Int. 18, and of Mason McClellan in August and September, 1877, Record 926, Int. 15 and 16.)

Mr. Thurston admits the Long fence, but says that it was made in 1875 instead of 1873, as Long and others state, and fixes it by the fact that they proved that a car load of lumber was shipped to Mr. Long from Dubuque in 1875. Look at digest of Mr. Long's testimony, p. 86 and 87 of Mr. Offield's argument, and it doesn't show that Mr. Long testified where he got his lumber, but says he don't know.

Jeremiah Shade is produced by complainants to show that Mr. Long had no board fence on his land in 1875 (where we showed that Mr. Long put up his barbed wire in that year) and had no such fence up to May, 1874, on

cross examination stated: "There were no passenger "trains run while we were in the country. We had to "cross the track every time we went from father's house to "the farm. I wasn't in the country when they commenced "running passenger trains by Henry Long's farm. They "did not run in '72, and I am not mistaken in my dates. "I did not know anything about the condition of Mr. "Long's fences after the passenger trains commenced run-"ning regularly on the road." (Record, p. 295, Cross Int. 39 to 45 inclusive.)

The testimony of defendants' witnesses, Willson and Scofield, in our brief by A. S. Blair, p. 89 and 90, shows that the trains commenced running on that road in fall of 1871. (Record 1,533 and 1,509.)

Also complainants' witness, F. B. Doolittle, testified that "the trains on that road commenced running regularly in 1872, Oct." (Record 480, Cross Int. 63.) This disposes of the testimony of Mr. Shade. He is mistaken in the date when he left the county and knew the Long fences.

The testimony of complainants' witness Geo. C. Patterson is reviewed on page 42 of our Mr. Henderson's brief. On cross-examination he corroborates Mr. Long.

Also the testimony of their witness Charles Moore on page 43 of said Henderson's brief.

Our time is too short before the hearing of this case to go into a review of the testimony of the various witnesses of complainants in rebuttal of these different fences, but the cross-examination of nearly all of them shows about the same want of knowledge as the witnesses before named.

Mr. Offield's brief filed herein, purporting to give a digest of the testimony of all of the witnesses in the case, is such a strange mixture of assertions, arguments, theories, and of purported testimony of witnesses that we hardly know how to treat it. As it was not filed until

the 7th inst., and the case is likely to be reached most any day, we dare not take the time to review the whole of it in this supplement before time to file it, and have to only show some of the unfairness of the digest and review testimony of an occasional witness.

The testimony is unfairly stated and apparently with an improper design. Most of the witnesses as to the Morley fence are old men and retired farmers, having ceased work as they ought to have done. When asked the preliminary question as to age and occupation, &c, would state that they had no occupation. This, of course, was on account of their age. Yet the counsel takes advantage of this, and starts with the statement that witnesses *had no occupation*, thinking, probably, to create the impression that they were idlers, and not entitled to credit. For instance, E. Haley (p. 14 of Mr. Offield's argument) counsel states has *no occupation*. This witness is not only an old man, but owns 500 acres of land. (Record, 1088, Int. 1 and 4.) Aaron Sullivan, Mr. Offield says, is a loafer. His age was 75 when he testified. (Record, p. 1161, Int. 1.) J. Lukenbill was 70. (Record, 1145, Int. 1.) And so on. Every witness of ours he makes some slurring remarks about. Mr. H. L. Bates, the man who helped Mr. Morley make his barbed wire, is similarly described by counsel as having *no occupation*. He ventures to ask the witness J. F. McKay if he knew this man Bates, "a man who now has no occupation, except his wife keeping boarders," to which the witness answers: "He is a very great worker. He is idle from necessity; from rheumatic affliction." (Record, 1452, Int. 4.)

A similar slur is sought to be cast upon the witness Potter, who is the man who produces the Morley barbed wire exhibit. Counsel asks witness S. R. Young if he "ever knew that Potter had money enough to get out of

"town," &c., to which witness answers: "Mr. Potter is "considered well off." (Record, 1459, Int. 54.)

The whole digest abounds in such slurs, but we will note no more of them. The reply would be about the same in each case.

Witness Spangler, counsel states, is a man who for 23 years has owned no property. The testimony shows that he owns a farm of 200 acres. (Record, 1420, Int. 11 and 12; and 1422, 1 and 2, Re-direct.)

The complainants put a Mr. Booth on the stand, who is shown the Delhi Wire Exhibit, and asked if the barbs were cut with shears, and he says no. (See Offield's argument, p. 34.) And this is to contradict Mr. Bates; but Mr. Bates testifies that the barbs were cut with a cold chisel. (See Mr. Bates's answer to Int. 17, Record, p. 1322.) This Booth is not asked about a cold chisel cut, so his testimony does not effect Mr. Bates's testimony.

The same counsel makes an attack on the Morley Delhi Wire Exhibit. (Page 10 of argument.) This is absolutely unwarranted. Not the slightest evidence is offered touching the effect that ammonia would have on iron. It is alkaline in property and could not oxidize iron like an acid, and it would seem that grease put on would have the effect of arresting oxidization, instead of promoting it. His theory of chemical effects is about as absurd as are his opinions as to the facts.

We do not deem it necessary to go through with all this strange mixture in said argument. We will, however, call attention to the cross-examination of complainants' witness, I. U. Butler, who was called for, and counsel claim did effectually overthrow the Hutchison fence. It will be remembered that our witnesses, the Hutchinson family, testified that they put staples on smooth wire on the Hutchinson farm in 1869, with pinchers such as farmers used in ringing hogs, and they thought they got

the staples and pinchers of I. U. Butler. (See our testimony on pp. 74, 75, and 76 of Brief filed by A. S. Blair.)

To contradict this, complainant put on the stand said Butler, who testified in his direct that he did not deal in such staples nor pinchers until 1877. But on cross-examination he states:

"I presume I bought fence staples in 1867; bought "them by the keg. I continued to buy them through "1867, 1868, 1869, and up to the time I sold out. I "bought farming pinchers in 1868, a great many of "them."

(Record, p. 640, cross-int. 36 to 41 inclusive.)

This witness also testifies that he received over $100 and expenses for going to Chicago, and testifying in this case, and did not go on a subpoena. (Record, pp. 645 and 646, cross-int. 127 and 128.)

This utterly overthrows this witness's direct testimony and also overthrows that of his brother-in-law and clerk, F. A. Lowell, who also testifies that "Mr. Butler did not "deal in staples for barbs on fence wire nor pinchers to "put them on with up to 1873." (Record, p 481, Int. 11 and 12.) He does not, however, say that Mr. Butler did not have fence staples and farmers' pinchers for sale during that time.

This testimony of complainant's being what counsel relies on almost exclusively to overthrow the Hutchinson fence, and, as we think, utterly fails to do so, leaves this fence unquestionably proven by defendants.

We, therefore, leave this digest and will return to the argument of Mr. Thurston.

Replying to Mr. Thurston's argument, first, as to his claimed adjudication of the patent in suit, by Judge Treat in case of these complainants *vs.* Frechs, 16 Fed. Rep., 661, we say this patent was not involved in that case. The action was upon other patents and reissues and

anything he said therein in reference to this patent is not an adjudication of this patent, but was entirely outside of the case, and his statement of the principle involved in this patent clearly shows that this patent was not discussed therein, or, if so, that it was not fully done.

Judge Shiras, in this case, on p. 32, of the Record herein, in speaking of that case before Judge Treat, says: "The judicial conclusion thus reached and announced "does not determine the question now under consideration, "nor does it relieve this court from the duty of examining "and determining it." In this view of Judge Shiras we think this court must concur. This Judge further says, in relation to this binder wire of Kelly (p. 33 of Record), "A glance at the drawing or at a fence (Kelly wire) "shows that the necessary effect of the twisted wire is to "block the movement of the points, etc." Our opinion, therefore, is that the opinion of Judge Treat can not figure in this case. By the showing of this coiled barb in his May 12, 1874, patent, No. 150,683, by Mr. Glidden while his application for his patent, the one in this suit, was pending, and afterwards obtaining a reissue of that patent in two divisions, in one of which, 6,913, he claims the invention of the barb, ignoring in the reissue this subsequent patent involved in this suit, he virtually abandons any thought or idea of authorship of the barb in this Nov. 24 patent.

In the decision of Judge Drummond he says this patent of May 12, 1874, and the reissues, in connection with the patents of Hunt and Kelley, deprive the Glidden patent, of November 24, 1874, of any invention which is patentable. 4 Fed. Rep., 900.

To avoid this objection the complainants insist that the patent of May 12, 1874, is not an anticipation of the patent of November 24, 1874, because the application for this last patent was filed in the Patent Office October 27,

1873, and the application for the former March 14, 1874.

The answer to this is that the invention is shown and described in the patent of May 12, 1874, and that if the patentee had desired to reserve this for the patent to be issued, on a prior application, he should have so stated, and that it would be claimed in such subsequent patent. But instead of doing this he permitted the patent to issue on the last application and then reissued this first patent, claiming this twisted wire and barb as his invention and as included in this patent of May 12, 1874. This is an estoppel *in pais*, if there ever was one, in regard to any claim that this twisted wire and barb is covered by the patent of November 24, 1874. The claim in the reissue of the patent of May 12, 1874, reissued February 8, 1876, No. 6,913, is:

"In combination with a fence wire, a barb formed of a short piece of pointed wire, secured in place upon the fence wire by coiling between its ends, forming two projecting points, substantially as described."

The drawing shows a barb coiled on a fence wire and a second wire twisted around the first and over the barb so as to hold it in place.

The drawing of the Glidden patent of November 24, 1874, shows this same construction, and the claim is:

"A twisted fence wire having the transverse spur wire bent at its middle portion about one of the wire strands *a* of said fence wire and clamped in position and place by the other wire strand *z* twisted on its fellow, substantially as specified."

Now, this is just what the drawing shows in the reissue of the Glidden patent of May 12, 1874, and the patentee can not be allowed to say at this time that it was not a part of the invention he patented in that patent. In obtaining this reissue he admits that he obtained in May, 1874, a patent for the invention for which he made an

application in October, 1873, and that the patent obtained November 24, 1874, as the result of such prior application was a second patent for the same invention.

An inventor can not have two patents for the same thing; therefore the second patent must be declared invalid in consequence of the acts of the patentee. The estoppel is complete. The patentee or his assignee can not come in now and for the purpose of sustaining this suit allege that his obtaining his reissue of the patent of May 12, 1874, was a fraudulent proceeding on his part, and that it should be entirely set aside, when he can no longer use it.

It seems to us that the case of the Suffolk Mfg. Co. *vs.* Hayden, 3 Wall, 315 (318 and 319), should determine which is to be considered the prior patent in the case before the Court.

In that case Hayden had made an application for a patent in 1854. In 1855 he made application for a patent which issued March 17, 1857. In June, 1857, he made application for a patent for part of the invention described in his application of 1854 and a patent issued Dec. 1, 1857. Afterward, in 1860, a patent was granted on the application of 1854, and the Court (page 319) says: "And as is alleged for the same improvement embraced in the patent of the 1st of December, 1857, the one in question. And it is insisted that, for this reason, this prior patent for the same improvement is void. This is obviously a misapprehension. The last, not the first, is void.

In this case before the Court Glidden made an application for a patent on an improvement in wire fences October 27, 1873. While this application remained in the office, on the 14th of March, 1874, he made another application for an improvement in stretchers for wire fences, on which a patent was granted May 12, 1874, which was

afterward reissued, No. 6,913, February 8, 1876, for an improvement in barbed fence wire, and covered the invention described in his application of October 27, 1873. This application of October 27, 1873, was subsequently granted and a patent issued therefor November 24, 1874.

Under the ruling just cited this last patent of November 24, 1874, must be held void, and the patent of May 12, 1874, valid. If for this reason this patent of November 24, 1874, is held to be void, then this suit must fail.

A. S. BLAIR,
Counsel for Appellees.

Office Supreme Court U. S.
FILED,
DEC 19 1891
JAMES H. McKENNEY
CLERK.

IN THE

Supreme Court of the United States.

OCTOBER TERM, 1891.

WASHBURN AND MOEN MFG. CO. AND ISAAC L. ELLWOOD, *Appellants*,

vs.

BEAT 'EM ALL BARBED WIRE COMPANY, *et al.*, *Appellees.*

No. 128.

SAME

vs.

W. W. NORWOOD.

No. 129.

SAME

vs.

JOHN D. MILLER.

No. 130.

BRIEF FOR APPELLEES.

W. H. SINGLETON,
Of Counsel.

IN THE

Supreme Court of the United States.

OCTOBER TERM, 1891.

WASHBURN AND MOEN MFG. CO. AND ISAAC L. ELLWOOD, *Appellants*,

vs.

BEAT 'EM ALL BARBED WIRE COMPANY, *et al.*, *Appellees.*

No. 128.

SAME

vs.

W. W. NORWOOD.

No. 129.

SAME

vs.

JOHN D. MILLER.

No. 130.

BRIEF FOR APPELLEES.

FIRST MAIN PROPOSITION.

When the same applicant has pending, at the same time, in the United States Patent Office two applications for patent, and one of these becomes a patent, the status of the other application is controlled by this patent, and if the remain-

ing application should become a patent, and both patents cover the same specific invention, though the scope of the claims may be different, then the later patent is void, and this is so whatever the filing dates of the two applications; or, in other words, there cannot be two patents for the same specific invention.

Suffolk Co. *vs.* Hayden, 3 Wall., 315.

First Subsidiary Proposition.

Whatever is contained in a re-issued patent, though it may be void as against others, in so far as the patentee is concerned, takes date from the original patent, and he is estopped from setting up that the re-issued matter was not in his original patent.

A re-issue bears the date of the original for all purposes except as the foundation of an action for infringement.

Robinson on Patents, 713, and authorities cited.

Second Subsidiary Proposition.

Where a patent contains a generic claim and shows more than one species of the genus claimed, all these species become public property upon the expiration of the patent, unless there is a reservation of some one or more species, and the same is contained in an application pending in the Patent Office prior to the grant of the generic patent.

Siemens *vs.* Sellers, 123 U. S., 276
Rules of Practice, U. S. Patent Office, Rule 43.

Facts showing that the present case comes under the first main proposition and its subsidiary propositions:

Joseph F. Glidden filed an application for patent in the United States Patent Office

October 27, 1873,

and another

March 14, 1874.

The latter application was patented (p. 1997)

May 12, 1874; No. 150,683,

and the former (pp. 1963, 1977)

November 24, 1874; No. 157,124,

and is the patent in suit.

The earlier patent,

May 12, 1874; No. 150,683,

was reissued in two divisions, one of which only need be considered,

(p. 1995,)

Division A, February 8, 1876, No. 6,913.

The claim in issue is this (p. 1979):

A twisted fence wire having the transverse spur wire D bent at its middle portion about one of the wire strands, *a*, of said fence wire, and clamped in position and place by the other wire strand *z* twisted upon its fellow, substantially as specified.

The object of this is stated at bottom of page 1978.

This operation locks each spur wire at its allotted place, and prevents it from moving therefrom in either direction. It clamps the bend of the spur wire upon the wire, *a*, thereby holding it against rotary vibration.

It will be noticed that the locking of the spur from movement in either direction is stated first and the clamping afterwards. Evidently the former is the more important. There is a plain reason for the former, *i. e.*, to space the spurs apart. There is no reason given for the clamping nor is any obvious. It is simply the absolute necessary result of the construction. It cannot be so as to keep the points projecting outwardly. The patent shows them vertical, and, therefore, inoperative. And in putting up a piece of wire they project in many directions.

Now compare figure 1 of reissue A (opposite page 1995) with the drawing of patent of November 24, 1874 (opposite page 1977), and the construction is identical, as the number of twists matters nothing (Reissue, p. 1996).

Read the claim of the patent in suit with the reissue drawing, and it covers it identically and specifically.

The reissue specification (p. 1996) says:

> It is obvious that my peculiar barb is adapted for attachment to one fence wire only or to many fence wires united together.
>
> My barb consists of a short wire pointed at each end, and wrapped or coiled around a fence wire, or around such number of wires as the fence builder shall see fit to unite together.

It is only necessary to look at the two drawings to see that the object sought in the patent in suit is accomplished by the reissue device, *i. e.*, the prevention of movement of the barb along the wire or around it.

It is perfectly obvious that the reissue, Division A, and the patent in suit contain the same precise specific invention, and as the reissue takes date from May 12, 1874, then the patent of November 24, 1874, No. 157,124, is invalid, in view of Glidden's own earlier patent.

The claim in the Reissue Division A covers the barb around "a" fence wire, and the barb is secured upon "the fence wire."

The language of this claim points only to what is in Figure 1, and does not cover what is in Figure 2. And this is precisely what is in the patent in suit, *and a reissued claim should be construed strictly.*

But if this be a too narrow construction, the claim covering both forms, then both forms become public property when the reissue expired.

Whatever is contained in the reissued patent, Division A, became public property after May 12, 1891. Up to that date Joseph F. Glidden, or his assigns, were protected as against the public in whatever that reissue contained if valid. If not valid the owners could not complain, as the reissue was their own voluntary act.

Charles F. Washburn, a witness for complainant, testifies (page 777) that in 1886 44,000 tons of Glidden barb were made, and on page 781, at top, that the licensees are allowed to make 173,080 tons per annum.

From May 12, 1891, to November 24, 1891, is over six months. During this time there would be made some 22,000 tons, and nearly 90,000 tons permitted.

Upon May 13, 1891, the public had the perfect right to begin the free manufacture of what is shown in Figure 1 of the drawing of Reissue Division A, and, if complainant's estimate is right, the licensees of complainant did manufacture over 22,000 tons.

Now, if the patent in suit is valid, then they had to pay royalty upon this large output when the precise device was shown in the patent which expired May 12, 1891.

How much more may have been manufactured by others who have refused tribute to this patent is not known.

Second Main Proposition.

A combination of old elements in an old way to produce an old result is not patentable.

See cases passim.

Facts showing that the present case comes under the Second Main Proposition.

The elements contained in the claim in issue are:

Two main wires and a barb wire.

The way they are combined is:

The barb wire is bent at its middle portion about one of the main wires, and the two main wires are twisted together.

The result produced is:

The barb is prevented from movement along the wires or transverse thereto.

Whether it be held that Glidden and his assigns are concluded by what is in his Reissue Division A, it is certain that they are bound by what is shown in the original patent of May 12, 1874, No. 150,683.

In this patent are shown:

Two main wires and a barb wire. And the barb wire is identical in construction with that contained in the patent of November 24, 1874.

Therefore, the elements contained in the claim in issue are old.

The result produced by the construction shown in the original patent of May 12, 1874, is:

The barb is prevented from movement along the wires or transverse thereto.

The first branch of this result is clearly set out in the specification (page 1,997).

The wires, B C, between the coiled barbs, E, are spread apart and bent so as to prevent the barbs from sliding on the wires and getting misplaced.

And an inspection of the drawing shows that as the barb surrounds two wires it cannot possibly turn around them, because the wrap is longer in one direction than in the other.

Therefore, the result produced is old; and in Glidden's own prior patent we find the same elements producing the same result.

The only distinction is that in the former patent the barb is bent about two wires instead of one, but it is the same barb.

In the patent of (page 2,001)

M. Kelly, February 11, 1858, No. 74,379,

Figure 2 shows two main fence wires with barbs on one of them, and the two wires twisted together.

These barbs are pieces of metal with perforations, and they are strung on one wire and the other twisted about it.

It is clear from the drawings that the barbs cannot move along the wires, and the specification (page 2002) says that the construction of Figure 2

Tends to insure a regularity in the distribution of the points in many different directions.

The use of the expression, "*in many different directions,*" can only mean that the barbs point in different directions, and that the construction "insures" this.

And in his specification (bottom of page 2001) he says he prefers to have the barbs stand in different planes. In other words, that, when once put in place, they cannot rotate on the wire.

And this result is produced by the second wire. For if the barbs were compressed on one wire where two are used, as is the case when only one is used, then the second wire would have nothing to do with insuring the regularity of the barbs, as they would be regularly placed one one wire. And in figure 2 the barbs are not shown compressed.

And (top of page 2002) he says that the barbs may be put on loose and may be distributed and secured after the fence is erected. He then goes on to describe figure 2, which shows one way of "distributing" the barbs.

And it is obvious from the shape of the barb that it could not turn while the second wire bore against it.

And further down in the specification he says he may simply string the barbs on a hemp cord and twist two or more cords together.

Kelly slips his barbs on one wire.

In the specification of the patent in suit (p. 1978) Glidden says:

> Although these spur wires may be turned at once around the wire strand, it is preferred to form the central bend first, and to then slip them on the wire strand, arranging them at suitable distances apart.

Glidden's preferred way is precisely like Kelly's, nor does Glidden explain how the barb wire may be turned around the main wire, or indicate any means for so doing.

Kelly then has the two main wires, a barb wire strung on one of them, and the two main wires twisted together so that the barb wire cannot move along the main wires or transverse thereto.

The only distinction between the Kelly patent and the one in suit is the precise construction of the barb.

But this is found in Glidden's earlier patent.

If, therefore, there be anything patentable over the Kelly patent in the shape of the barb, there is no invention in substituting for the Kelly barb, the barb shown in Glidden's early patent.

Or, if it be contended that the Kelly barb will rotate, the Glidden barb of May 12, 1874, when substituted for the Kelly barb in the Kelly combination will not rotate, and this

is simply a natural result of the combination, and requires no invention to foresee it.

The patents of Kelly and Glidden of May 12, 1874, show that all that the patent in suit contains is a combination of old elements in an old way to produce an old result, and is, therefore, invalid.

The Morley Fence.

Regarding the character of the evidence in this behalf, it is to be noted that Alvin Morley, the putative inventor, was not a witness, and died before this suit was commenced. There can come no honor or profit to him. Those who survive him, a widow and children, who might be supposed to have a pride in his being decided the inventor of a famous device, all testify for the complainants. They say they do not believe he ever invented the fence and that he died a maniac.

Of all the witnesses who testify as to this fence, there is not one who has anything to gain or to hope for. They are ordinary, simple, every day folk who have no object save to tell the truth, and their direct positive evidence is only met by the testimony of a few persons who say they did not see this fence.

A sample of this is shown in the testimony of the two Potters, father and son.

The father testifies positively that he saw the fence, and produces a sample which he had in a trunk. The son says he often went to the trunk and never saw this piece of wire.

In a voluntary affidavit found on page 2016, this son retracts what he has deposed to. Without placing any reliance on the affidavit, it shows at least that he is utterly untrustworthy, and, therefore, in nowise contradicts the direct positive evidence of his father.

M. B. Snigleton.
Counsel for appellees.

Glidden [illegible]
Kelly barb in the Kelly

Office Supreme Court U. S.
FILED.
DEC 15 1891
JAMES H. McKENNEY,
CLERK.

IN THE SUPREME COURT OF THE UNITED STATES.

OCTOBER TERM, 1891.

No. 128.

WASHBURN & MOEN M'F'G CO. and ISAAC L. ELLWOOD,

Appellants,

vs.

BEAT 'EM ALL BARBED WIRE CO., et als.,

Appellees.

No. 129.

SAME,

Appellants,

vs.

W. W. NORWOOD,

Appellee.

No. 130.

SAME,

vs.

JOHN D. WILER, et al.,

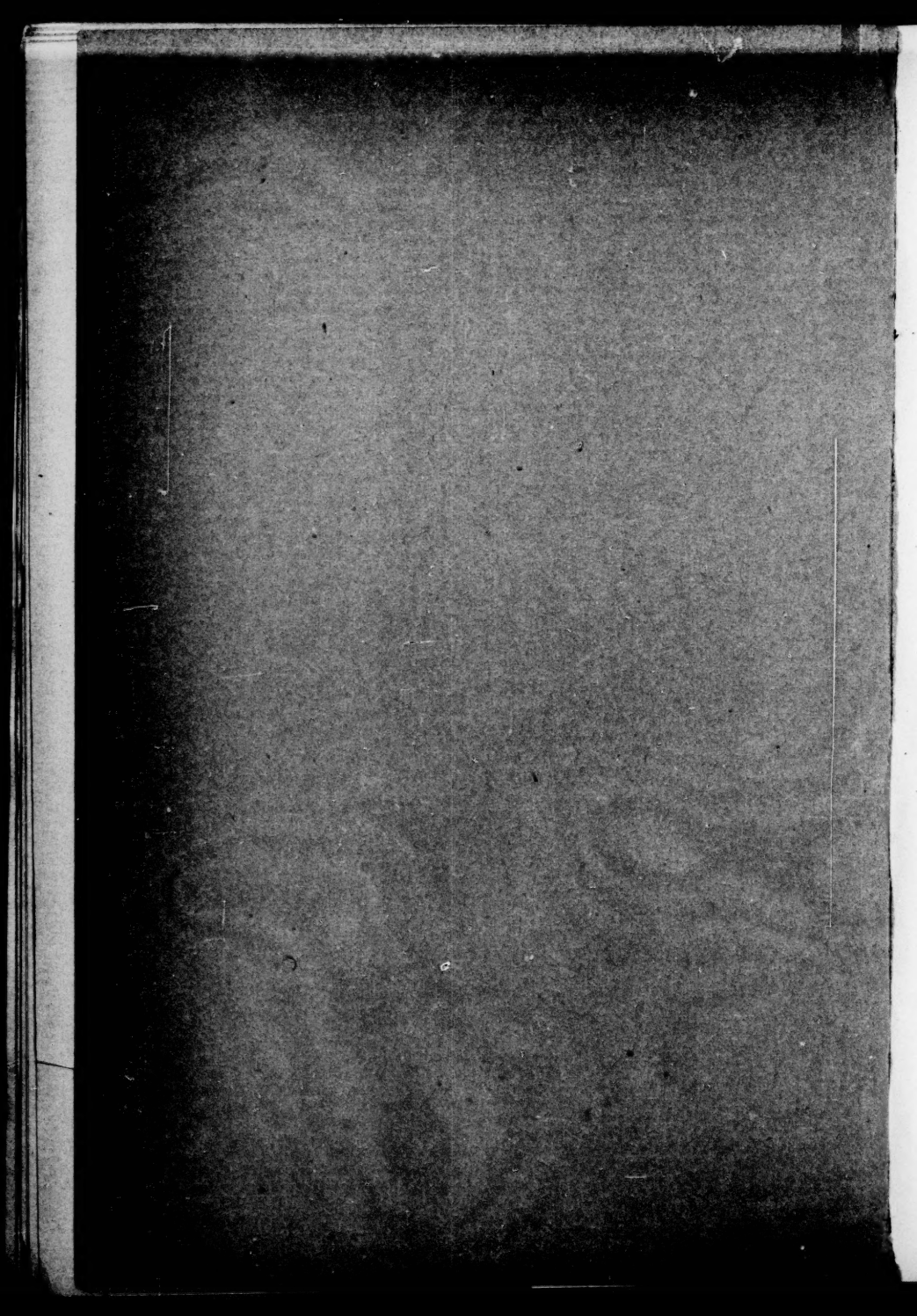
Appellees.

BRIEF AND ARGUMENT FOR APPELLANTS.

JOHN R. BENNETT,

Counsel for Appellants.

LIVINGSTON MIDDLEDITCH & Co., Printers, 149-153 Leonard St., N. Y. City.



In the Supreme Court of the United States.

OCTOBER TERM, 1891.

WASHBURN & MOEN MF'G. CO. and ISAAC L. ELLWOOD. Appellants, v. BEAT 'EM ALL BARB WIRE COMPANY *et. al*, Appellees.	No. 128.
Same, Appellants, v. W. W. NORWOOD, Appellee.	No. 129.
Same, Appellants, v. JOHN D. WILER, *et al.*, Appellee.	No. 130.

BRIEF FOR APPELLANTS.

Statement of Cases.

The bills, which are in the usual form and to like effect, charge the Appellees respectively with infringement of the claim of Letters Patent of the United States No. 157,124, issued to Jo-

seph F. Glidden November 24, 1874—the application for which was filed October 27, 1873—for "Improvement in Wire Fences," the title to which is shown to be in the appellants, and so admitted (Rec. p. 766.) The appellees in No. 128 being the Manufacturers [Rec. p. 767] and in Nos. 129, and 130, the vendees of the wire fencing in question (Rec. 129, p. 11 Rec. 130, p. 11)

The Appellees in their answers, (Rec. p. 19; Rec. 129 p.) 10 Rec. 130, p. 10) which are substantially the same, do not deny infringement, and admit they received due and timely notice thereof from the Appellants (Rec. p. 21, and Sec. xi) but assert the invalidity of the Glidden patent No. 157,124, upon the following grounds, viz:

(1.) "that in view of the state of the art at the time said letters patent No. 157,134 were granted, there was no invention in the device described and claimed therein." (See p. 22, Sec. XIII.)

(2.) "that the said Joseph F. Glidden was not the first and original inventor of the device described and claimed in said letters patent No. 157,124, dated November, 1874, but that the same or all substantial parts thereof had been shown and described in letters patent of the United States issued to various persons long prior to the date of the said patent No. 157,-124, as follows:

William D. Hunt, dated July 23, 1867, No. 67117.
Michael Kelly, dated February 11, 1868, No. 74379.
Joseph F. Geddin, dated May 12, 1874, No. 150,683.
Lucian B. Smith, dated June 25, 1867, No. 66,182.
Michael Kelly, dated November 17, 1868. No. 84062.
George W. Otis, dated July 21, 1868, No. 80205.
Louis J. Hawley, dated Feb. 6, 1868, No. 52411.
Byron Boardman, dated March 30, 1858, No. 19747.
Michael Kelly, dated November 17, 1868, No. 84062.
Elias C. Patterson, dated July 14, 1868, No. 79854.
Zepheniah Knapp, dated October 24, 1848. No. 6831.
Lucius Leavenworth, dated October 30, 1849, No. 5884.
William H. Merriweather, dated November 8, 1853, No. 10211.
Mathew Walker, Mathew Walker, Jr., and Daniel S. Walker, dated March 29, 1853, No. 9642.
James Moore, dated June 30, 1857, No. 17692.
51 Isaac Knapp, dated June 7, 1864, No. 43032.
H. B. Myers, dated November 27, 1864, No. 45298.
(Rec. p. 22, Sec. XIV.)

(3.) "that the said Joseph F. Glidden was the first and original inventor or discoverer of the improvement in wire fences described and claimed in said letters patent No. 157,124, but, on the contrary, they aver that the same or all substantial parts thereof, long prior to the alleged invention thereof by the said Joseph F. Glidden, were known to or used by the following persons, viz:"

(Rec p. 22, XV.)

Names by which the alleged fences are known in these cases:

(1.) Morley's Delhi Fair Fence.

(2.) Morley Travelling Cow-Pen.

(3.) Morley Mill Farm East Line and South Line Road Fence.

(4.) Morley South Farm Road Fence.

(5.) Morley's Wire and Mill.

(6.) W. H. Long Fence.

(7.) Chester D. Stone Fence.

(8.) Manchester Fair Fence.

(9.) Hutchinson Fence.

(10.) E. A. Beers' Fence.

After issue joined in No. 129, the appellants proved the manufacture and sale, in July, 1885, by the appellees of wire fence of the construction set forth in and covered by the claim of the Glidden patent in suit, the specimen produced being marked "Complainants' Exhibit Defendants' Wire" (Rec., p 767, Millington, Dept.), and the identity of the two structures was pointed out by the appellants' expert witness, Powers (Rec., p. 770, Int. 5).

Q. 5. Please look at the "Complainants' Exhibit Defendants' Wire," the same being a sample of wire manufactured by the defendants, and state whether or not, in your opinion, said wire is constructed substantially like the wire shown, described, and claimed in the "Glidden" patent. Give your reasons for any opinion you may express.

A. On examining said wire exhibit and comparing the same with the wire shown, described, and claimed in said patent I find the wire Exhibit Defendants' Wire to be substantially identical in every respect with the wire of the Glidden patent and summed up in the claim thereof. My reasons for regarding Defendants' Wire Exhibit as substantially identical with the wire of the Glidden patent are that it is a fence wire composed of two strands, the same as Glidden, with short pieces of

wire coiled between their ends around one of the strands, so as to present their points in opposite directions and transverse to the strand, the same as with Glidden, and then being wrapped by the other strand, the two being twisted together so as to lock and secure the barb, the same as with Glidden, and thus constituting a barb fence wire consisting of two twisted strands with wire barbs at proper intervals, substantially identical in all respects with the barb wire of Glidden. I am unable to discover any material difference between the Glidden wire as shown and described in the patent and defendants' wire. There may be slight mechanical differences between the two samples or styles of wire, but not such as embody anything material in principle or operation. I therefore regard Defendants' Wire Exhibit as substantially identical in all respects with the Glidden wire and to be fully covered and embraced in the claim o. the Glidden patent.

Extended proofs were taken by the appellees in support of the defenses asserted in their answer, especially as to the above enumerated alleged prior fences, and replied to by the appellants.

In Nos. 129 (Rec., p. 14) and 130 (Rec., p. 15), orders were entered by consent of all the parties consolidating those causes with No. 128, and that like decrees be entered in those cases as in No. 128.

Upon the pleading and proof the cases were argued at the Circuit before his Honor, Judge Shiras, sitting as Circuit Judge, and the bills dismissed for reasons set forth at length in the opinion of the Court filed Jan. 5, 1888 (Rec., p. 29), the opinion concluding:

"The patent being void, however, on the ground that it is "only a combination of known elements, of which Glidden was "not the first inventor, for the production of an old and known "result, and it is, therefore, lacking in patentable novelty, the "bill in this cause must be dismissed on its merits at com-"plainant's costs." (Rec., p. 43.)

A reading of the opinion shows that the Circuit Court held the patent void for insufficiency of invention in view of the prior state of the art as established by the prior patents offered in evidence and the Morley fence, the existence of which the Court found was established as claimed by the appellees, although no one of the prior patents nor the Morley fence showed the structure of the claim of the Glidden Patent No. 157,124.

From the decrees entered as directed in the opinion of the Court these appeals were taken.

Assignment of Errors.

The Circuit Court erred :

(1) In holding the claim of the Glidden patent void as "lacking in patentable novelty."

(2) In finding that it was established by the proofs "that Alvin Morley did, as early as the year 1859, make use of a barb formed of a sharpened wire coiled around the strand or fence wire, for the identical purpose subserved by the barb in the Glidden combination."

(3) In holding, assuming, that Morley did, as early as the year 1859, make use of a barb formed of a sharpened wire coiled around the strand or fence wire, for the identical purpose subserved by the barb in the Glidden combination, that such "use was not confined to mere experiment."

(4) In finding that Glidden was "proved not to have been "the first inventor of either the twisted wire or the coiled barb "forming his combination."

(5) In concluding that the Glidden patent was void "on the "ground that it is only a combination of known elements, of "which Glidden was not the first inventor, for the production "of an old and known result, and that it is therefore lacking "in patentable novelty," and accordingly dismissing the Bills of Complaint.

(6) In not sustaining the validity of the claim of the Glidden patent, and holding the appellees to have infringed, and directing the entering of interlocutory decrees, as prayed for in the Bills of Complaint.

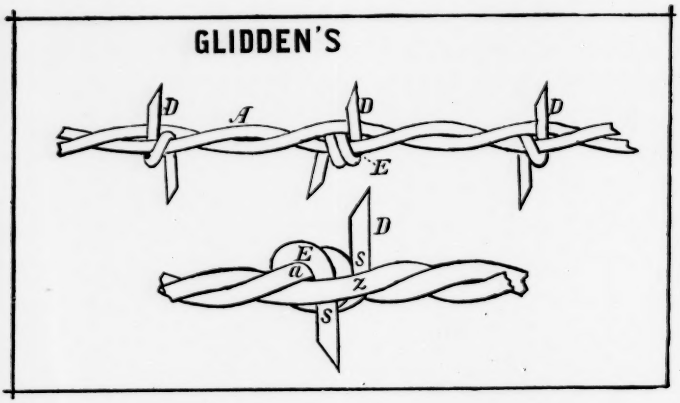
Appellant's Points and Argument.

I.

The claim of the Glidden patent is for

"A twisted fence-wire having the transverse spur-wire D "bent at its middle position about one of the wire strands "*a* of said fence-wire, and clamped in position and place by "the other wire strand *z*, twisted upon its fellow, substan- "tially as specified."

"As specified;" the invention consists, "in combining with "the twisted fence-wire a short transverse wire coiled or "bent at its central portion about one of the wire strands of "the twist, with its free ends projecting in opposite directions, "the other wire strand serving to bind the spur-wire firmly "to its place and in position, with its spur ends perpendicular "to the direction of the fence-wire, lateral movements, as "well as vibration, being prevented. * * * * The "fence-wire is composed at least of two strands *a* and *z* which "are designed to be twisted together after the spur-wires have "been arranged in place.



"The letter D indicates the spur-wires. Each of these is "formed of a short piece of wire, which is bent at its middle "portion, as at E, around one only of the wire strands, this "strand being designated by the letter *a*. In forming this

"middle bend or coil several turns are taken in the wire, so "that it will extend along the strand-wire for a distance sev- "eral times the breadth of its diameter, and thereby form a "solid and substantial bearing-head for the spurs, which will "effectually prevent them from vibrating laterally or being "pushed down by cattle against the fence-wire. Although "these spur-wires may be turned at once around the wire "strand, it is preferred to form the central bend first, and to "then slip them on the wire-strand, arranging them at suitable "distances apart. The spurs having thus been arranged on "one of the wire strands are fixed in position and by approach- "ing the other wire strand *z* on the side of the bend from "which the spurs extend, and then twisting the two strands *a* "*z* together by means of the wire key above-mentioned, or "otherwise. This operation locks each spur-wire at its allotted "place, and prevents it from moving therefrom in either direc- "tion. It clamps the bend of the spur-wire upon the wire *a*, "thereby holding it against rotary vibration. Finally, the "spur ends extending out between the strands on each side, "and where the wires are more closely approximated in the "twist, forms shoulders or stops *s*, which effectually prevent "such rotation in either direction.

"Should the spurs, from the untwisting of the strands, be- "come loose and easily movable on their bearings, a few turns "of the twisting-key will make them firm, besides straighten- "ing up the fence-wire."

The claim then is for a compound structure consisting of two wire strands and a spur-wire; the spur-wire bent at its mid- dle portion about one of the wire strands, and clamped in posi- tion and place by the other wire strand twisted upon its fellow. And the characteristics of that compound or composite struct- ure are (1) the barbs or spur-wires, each formed of a short piece of wire bent at its middle portion around one of the wire strands; and (2) the clamping of each of those barbs or spur- wires in position, viz., with its spur ends perpendicular to the direction of the fence wire, and at its allotted place, by the in- tertwisting of the two wire strands, whereby the barbs are prevented from moving in either direction, that is, are firmly held in both position and place.

By those characteristics is the Glidden structure at once dis- tinguishable from every structure that precede it.

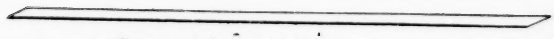
The claim is not limited to the placing of all the barbs on the same wire, the only requisite being that the transverse spur-wires must be coiled at their middle positions, around one of the wire strands, but they may be placed all on the same

strand, or part on the one strand and part on the other, or alternately upon the two strands. That is quite immaterial so long as the spur-wires are bent at their middle positions about one of the wire strands, and clamped in position and place by the intertwisting of the wire strands, as in each case the result is the composite structure of the claim.

Indeed, the drawing, Fig. 1, shows the barbs or spur wires part on one strand and part on the other, but in every case the barb or spur wire is bent at its middle portion around one of the strands only. Nor is the claim limited to the number of times the spur-wire is coiled around one of the wire strands; it must of course be coiled once around, and it may be coiled several times. The drawings show some of the barbs coiled once around and others twice around, and it is stated in the specification that "In forming this middle bend or coil several turns are taken in the wire." Nor is the claim limited to the degree of sharpness of the points of the barb or spur-wire. That the points are to be sharp is evident from the fact that they are termed "spur-wires," which they would not be if the projecting ends were not sharp, and are "for preventing cattle from breaking through wire fences," which they would not do if the projecting ends were not sharp. So, then, according to the very terms of the patent the projecting points of the barbs or spur wires must be sharp enough to at least turn cattle, thereby preventing them from breaking through the wire fence. As to the degree of sharpness necessary for that purpose it is largely a matter of opinion. It is equally Glidden composite structure whether the projecting ends of the barb or spur-wire be a sharp needle point or approaching bluntness, as shown in the drawings, so long as they prevent the cattle from breaking through the wire fence, since the character of the structure is in no wise changed by the degree of sharpness or bluntness of the points of the barbs or spur-wires.

II.

Glidden was the inventor, not only of the compound or composite structure set forth in the claim of his patent, but he was the inventor of the "spur-wire" formed of a short piece of wire bent at its middle portion around one only of the wire strands.



He was in fact the first to make a barb of a short piece of wire, by coiling it between its ends, for application to a fence wire, and this without reference to whether the barb was first formed and then applied to the fence, or applied directly to the fence wire in the act of forming it. His invention of the wire barb was sustained by *Judges Drummond and Blodgett* in the case against Haish, in the 4 Fed. Rep., 900, and by *Mr. Justice Brewer* then the Circuit Judge, in the case against the *Grinnell Wire Company*, 26 Fed. Rep., p. 25. Said *Mr. Justice Brewer:* "but the coiling of the transverse wire between its ends for the purpose of forming the barb was, so far, at least, as its application to fencing purposes, first expressed in the application of Mr. Glidden." Being the inventor, not only of the composite structure but also of its most essential element, viz., the barb or spur wire, Glidden's legal position as an inventor is a very different one indeed from what it would be had all the elements composing his composite structure been old and well known. And this proposition is not affected by Glidden's failure or neglect to obtain a separate claim for his "wire barb" or "spur wire."

Clough v. Barker, 106 U. S., 166, 177.
Morley v. Lancaster, 129 U. S., 263, 273, and cases there cited.

III.

Glidden filed his application for the patent in suit October 27th, 1873, and during its pendency in the Patent Office, and on March 14th, 1874, he made application for a subsequent and subordinate invention, for which a patent was issued to him May 12th, 1874 (Rec., p. 1997)—subsequently reissued February 8th, 1876 (Rec., p. 1995,)—while the patent in suit was not

issued until November 24, 1874. The patent in suit, although of subsequent date, is not subordinate to, nor is it in any way affected by the prior Glidden patent of May 12th, 1874, nor by any re-issue thereof; it being for a prior invention and issued upon a prior application.

The date of Glidden's invention of the patent in suit is established by the date of his application for the patent, to wit, October 27th, 1873, which is prior to both the dates of his invention and application for the patent of May 12th, 1874.

Loom Co. v. Higgins, 105 U. S., p. 594.

The date of invention and application and not the date of patent is the controlling date in determining as to the legal effect to be given to two patents issued at different dates to the same inventor in which are shown certain features common to both, but not claimed in the patent issued upon the subsequent application, and the order in which they are to be considered. In legal effect the Glidden patent of November 24th, 1874, is the prior patent. There is no such question here presented as the issuance of two patents for the same invention to the same inventor.

Suffolk Co. v. Hayden, 4 Wallace, p. 315.
McMillan v. Reese, 1 Fed. Rept., p. 722.

It is beyond dispute that Glidden in the fall of 1873 commenced the manufacture and sale of the two pointed barb wire fencing shown in the drawings of his patent, which he and his successors have continued down to the present time, and that on October 27th, he filed his application for that patent wherein he showed and described the wire and made a claim for it. (Rec. p. 1965.)

The drawings accompanying his original application are the drawings of the patent. There then is certainly evidence of his intention from the very outset to, if possible, obtain a patent for his compound wire, of which his barb was an element. In his specification he stated:

"The nature of the present invention consists of a compound twisted wire, in which are coiled or woven wire spurs for preventing stock from rubbing against the wires and becoming so familiar with them as to break through," * * * *

FIG. I

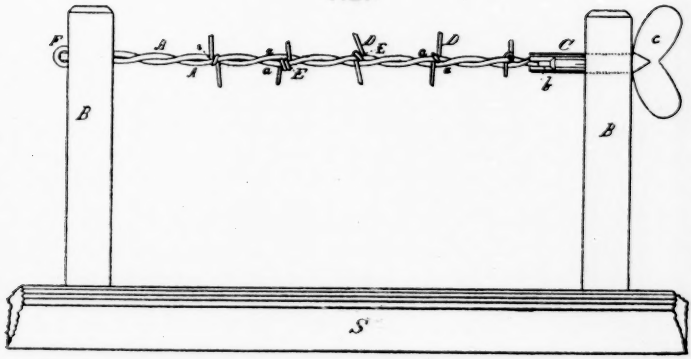
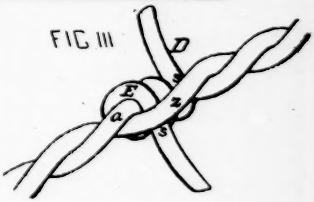


FIG. II

FIG. III



"In the drawings, Fig. 1 is an elevation of my improvement in compound twisted wire fence provided with spurs coiled thereon."

After that can there be any doubt that he regarded the compound wire structure shown in Fig. 1 of the drawings as his invention? A structure consisting of two wire strands twisted together and provided with wire spurs coiled thereon. He said the spurs are to be of wire and to be coiled on to the fence wire. How, is set forth in the description which follows:

"A A represents two wires, * * On one of the wires, A, at a suitable distance apart—in practice say one foot—are coiled spurs D E, the ends D projecting out far enough to prevent stock from rubbing against the wires and breaking them down. So that the wire spurs are to be coiled around one of the fence wires and then "After the spurs C are in number "properly adjusted, the twister C"—his means for twisting the strands together—"is turned in its respective post, so as to "twist the wires A A together as shown in Fig. 1, by means "of which the spurs are held firmly in place."

There describing the holding of the barbs in place by the intertwisting of the two strands. A specification in substance precisely the same as the specification of the patent and both directed to the same invention. The claim was

"1st. The wires A A twisted together and combined with the spurs D E, as and for the purpose set forth."

In legal effect precisely the claim of the patent in suit. It was a claim for the identical compound wire structure of the claim of the patent. It differed from it in not the slightest respect. He had shown in the drawings and described in the specification his spurs formed of wire coiled around one of the fence wires and held in place by the intertwisting of the two fence wires and he made it an element of his claim, as it was his invention and an essential part of his compound wire structure. It was that above everything else that distinguished his structure from every preceding structure. He made no claim for his wire barb or spur wire apart from his compound wire structure, for its great value to him was in that structure; that he did not, surely does not change the character of his invention in the slightest degree. The identity of the original application and first claim thereof with the specification and claim of the patent is most conclusively established by comparison; therefore, what may have happened in the interim between the filing of the application and the issuance of the patent, is quite immaterial. The controlling factors are his original application and the patent as issued.

On December 5th, the office rejected Glidden's application on the ground that "this invention is substantially anticipated in "the patent to Mr. Kelly, February 11th, 1868." Thereafter, on the 9th day of December, Mr. Glidden's solicitor, in amending the application, entered the following disclaimer: "I disclaim "the invention of prongs *per se* broadly, as such have been at- "tached to wire fence before, but confine myself to what is set "forth in the claim," and struck out the first claim. (Rec., p. 1969.)

The disclaimer obviously had reference to the prongs shown in the Kelly patent, and in view of that was fully justified, for therein was shown prongs. Glidden made no pretense of being the inventor of *prongs per se broadly;* he had not so stated in his application, and they were shown in the Kelly patent. In considering the intent and effect of the disclaimer, it is to be viewed in the light that prompted it, and that it was prompted by the reference to the Kelly patent admits of no doubt. It was nothing more than a disclaimer of the prongs shown in the

Kelly patent. Even had Glidden permitted that disclaimer to stand—which he did not—so that it now appeared in his patent' it would amount to no more than a disclaimer of the prongs shown in the Kelly patent, and as distinguishing his spur wires, bent at their middle portions, around only one of the wire strands, from the prongs or thorns of the Kelly patent. Glidden's invention was the wire barb, as distinguished from the prior "prongs," "thorns" and "spurs," and therefore he very justly disclaimed the invention of prongs *per se* broadly. "Prongs "*per se* broadly" would have included the devices shown in the prior patents to Hunt Smith and Kelly. There is nothing in the disclaimer nor in the circumstances under which it was made, that would justify the conclusion that Glidden intended to disclaim the inventorship of his wire barb. And such was the effect of *Mr. Justice Brewer's* decision in the Grinnell case.

On December 19th, his application was again rejected, and again rejected on January 12th. While under rejection, on March 14th, 1874, Glidden made his application for Letters Patent for a subsequent and subordinate invention.

It was set forth in the specification that:

"The nature of the present invention consists in the use of "two wires, which are provided at suitable intervals with "spurs coiled round them, and which are spread apart, be- "tween the coils, to keep the latter from moving longitudinally "on the wires. Midway between the posts is placed a slotted "tube, in which is put a coil spring to spread the wires and "automatically tighten them and keep them at the proper "tension as against expansion by heat and contraction by "cold."

FIG. 1.

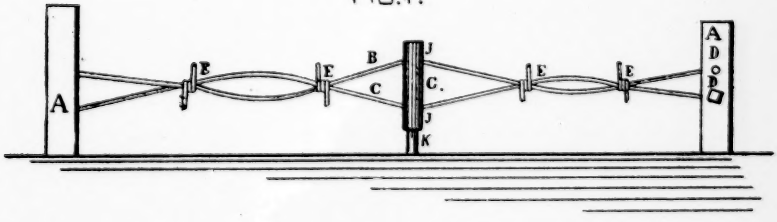
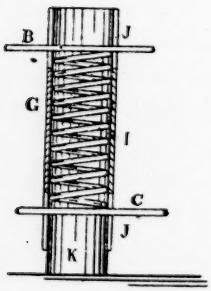


FIG. II.



In brief, it was a slotted tube-coil spring device for separating the wire strands, so as to prevent the barbs from sliding on the wires, as they were coiled around both the wire strands, instead of around one only, and clamped in place by the intertwisting of the wires, as in his prior compound wire structure. The barb, and it was so called, used in this invention, was the barb of his prior compound wire structure, and it was described and shown in the drawing, applied by coiling around both of the fence wires instead of around one. He made no claim for the barb, as, indeed, he could not well have done, as that was shown in his prior pending application, based upon his prior invention. On the contrary, he entered a disclaimer as follows:

"I do not claim to have originated the devices known as "'spurs' or 'prongs' on the wires, they having been used "before, but confine myself to the means for holding the spurs "at proper intervals on the wires, and to the means for attain-"ing a uniform tension of the wires as claimed."

He there disclaimed, not his inventorship of the wire barb, but simply that it was no part of his present application. It was equivalent to saying "I do not claim in this application to have originated the devices known as spurs or prongs on the wires," &c., which was literally true, for he had then been manufacturing and selling his compound wire structure for more than six months. It was simply a disclaimer for the purpose of excluding the barb as an element of invention from that patent. No difference what its effect, it was limited to that patent and cannot possibly be used to it in any way, affect or defeat Glidden's rights under the patent which was issued to him upon his prior application and which application was then pending in the Patent Office. It is possible that the disclaimer may have had reference to and been intended as a

disclaimer of the "spurs" and "prongs" of the Kelly and other prior patents, for there appears to be a very careful avoidance of the use of the expression "wire spurs" as well as of the words "barbs or wire" used in the body of the specification to designate the Glidden barb.

The claim of the patent is: "The combination of the wires "B C, slotted tube G, coil-spring I, and post K, for keeping "the wires in proper tension in various temperatures, as des- "cribed and shown."

No mention is made in the claim of the barbs, it being limited to the slotted tube coil spring device, for keeping the wire in various temperatures.

The patent issued May 12, 1874, and Glidden's subsequent action, taken in his pending application, completely negatives the possibility of his having intended in the May patent to either disclaim his inventorship of his wire barb or to abandon his right to a patent for either his barb or his compound wire structure, of which it was an element. He was not required to refer in the specification of his May patent to his pending application. Said this Court in considering a similar question, in *O'Reilly v. Morse*, 15 How., p. 63: "Nor is he bound in his "new patent to refer especially to his former one. All that "the law requires of him is that he shall not claim as new "what was covered by a former invention whether made by "himself or any other person."

On June 19th Glidden changed his solicitor and on June 20th he amended his application by striking out the entire specification and substituting a new specification and claims—being the specification and first claim of the patent. By that amendment he disowned the disclaimer for he caused it to be stricken from the record and in the specification which he substituted—being the specification of the patent—no such disclaimer is found. The substituted specification and claims was a return to the original specification and claims for the compound wire structure and for that structure in connection with the twisting key. The claim for the combination of the compound wire structure with the twisting key was rejected and stricken out, but there was no objection to the specification and first claim. Glidden, however, was notified on June 23, 1874, that his claim for the compound wire structure would be involved in an interference, and on June 25th, the interference was declared between Glidden's application and an application filed June 17th, 1874, by Jacob Haish of DeKalb, Illinois; which interference was on October 24th, 1874, decided in Glidden's favor, and accordingly the patent issued to him Nov. 14, 1874.

Thus it was that Glidden's patent in suit was issued subsequent to his patent of May 12, 1874, although the application for it was filed months prior to the application for the May patent. There is nothing either in the patent, or in the proceedings before the Patent Office, or in the patent of May 12th, 1874, that amounts to a disclaimer of Glidden's inventorship of the wire barb, or that constitutes an abandonment of his right to a patent for that barb, either separately or in combination, in his compound wire structure.

Upon this point, *Judge Shiras* said :

"Assuming that the patent as finally issued covers the form "of the barb or spurs as shown in the Glidden combination, "which is the effect of the adjudication by Judge Brewer "in the Grinnell case, and that Glidden sought in his "original application to secure that as part of his com- "bination, then it is not made clear that by the disclaimers "filed he intended more than to negative the idea that he "claimed to have originated the idea of putting spurs or "prongs upon plain fence wire. The fact that he renewed his "effort to obtain a patent upon his original application as "amended, and finally succeeded therein, shows that he had "not abandoned his claim to whatever of novelty might be "found to exist in the combination covered by the patent "issued, and, read in the light of his action in this particular, "it must be held that the evidence fails to sustain the de- "fense."

IV.

On February 8th, 1876, Glidden obtained a re-issue, No. 6,913 (Rec. p. 1995), of his letters patent No 150,683, of May 12th, 1874, for his slotted tube coil-spring device for keeping the wires in proper position in various temperatures, and in which was shown his barb formed of a short piece of wire coiled between its ends. He had neglected to obtain in either of his patents a claim for his barbs formed of a short piece of wire coiled between its ends, of which he was the inventor, other than as an element of his compound wire structure, and the purpose of the re-issue was to obtain such a claim. The claim he made was—" In combination with a fence wire, a barb "formed of a short piece of pointed wire secured in place upon "the fence wire by coiling between its ends, forming two pro- "jecting points, substantially as specified."

It was a claim for his manner of forming the barb as applied to a fence wire, irrespective of the means employed for holding it in position and place. In allowing that claim the Patent Office adjudged that Glidden was the inventor of the barb and entitled to a claim for it in view of the "spurwheels," "spools" and "thorns" shown in the prior patents to Hunt, Smith and Kelly. The issuance of the re-issue with that claim is *prima facie* evidence of the novelty and patentability of Glidden's invention as expressed therein, as is the November patent in suit of the compound wire structure claimed therein.

His May patent being the earlier of the patents in date, he surrendered and obtained the re-issue of that, in obedience to a rule of the Patent Office, sanctioned by judicial ruling, requiring in cases of re-issue the surrender of the earlier patent in point of date, not of invention and application, showing the device sought to be obtained by re-issue. The obtaining of that re-issue can in no wise effect the legal *status* of the patent in suit, any more than did his obtaining of the original patent of May 12th, 1874. The legal effect, if any, was that of patent in suit upon the May patent and re-issue thereof, and not of the May patent and re-issue upon the patent in suit.

Suffolk Co. v. Hayden, 4 Wall., page 315.
McMillan v. Reese, 1 Fed. Rept., page 722.

And such indeed was the reasoning of his Honor, *Judge Treat*, in the case of the *Appellants v. Fuchs*, 16 Fed. Rpt., page 667. The fact that the re-issue has been decreed invalid, as not authorized by law, and such decree acquiesced in by the appellants tends to strengthen the *prima facie* effect of the patent in suit. It certainly does not detract from it. It leaves Glidden in the position of the invention of the barb formed of a short piece of wire coiled between its ends, without a claim for it, other than as an element of his compound wire structure. As he cannot be protected in the use of his barb broadly, it is all the more the reason why he should be protected in the use of it in his compound wire structure. It is undoubtedly true that his omission to claim his barb *per se* is in legal effect an abandonment of it to the public but only in so far as he failed to claim it distinct from and independent of the combination or compound wire structure of the claim of his patent in suit.

V.

Glidden's invention is not lacking in patentable novelty. His composite structure was undeniably new in the sense that it did not exist before. In fact, barb wire as a commercial article was unknown prior to Glidden's invention. His invention was the foundation of the industry. Although the structures shown in the prior patents to Hunt, Smith and Kelly had been known for years before, no one had undertaken to manufacture them, and with the exception of the Kelly—the manufacture of which was not engaged in until 1876, and then only to a very limited extent—never have been manufactured.

His composite structure was also new, in a patentable sense, in that it not only did not exist before, but that its production involved and required the exercise of invention. It was not merely the substitution of one old form of barb for another, but the creation of an entirely new barb, and the application of that new barb to one strand of a fence wire and the holding of it in position and place by the other strand of the fence wire, intertwisting them, thereby producing the new composite structure of the claim.

The barb was new, the application of the barb to one strand of the fence wire was new, the holding of the barb in position and place by the other strand of the fence wire by intertwisting was new and the result was new. The bringing of those elements together and in a manner to produce the compound wire structure of the claim, called for the exercise of invention. The article itself, when compared with Hunt, Kelly and Smith, shows the "creative work of the inventive faculty" to a high degree. It shows the work of the inventor as distinguished from that of a skilled mechanic. It may now seem very simple indeed, but as this Court has repeatedly said, we must look at it in the light of the situation as it existed at and prior to the date of the invention in question.

The precise question was considered and determined by *Mr. Justice Brewer* in the case of the *appellants* against the *Grinnell Wire Company*, 24 Fed. Rep., p. 24:

"It is, of course, obvious that all of the elements that enter into this Glidden barbed wire were not new with him. The idea of protecting a smooth wire with some kind of a barb to prevent cattle from rubbing against and breaking a fence down, appears in the first patent issued. Then, in Kelly's patent, was the twisting of the two wires; but the coil of the

transverse wire between its ends, for the purpose of forming the barb, was, so far at least as its application to fencing purposes, first expressed in the application of Mr. Glidden.

"It is true that this coiling of the wire is by itself considered nothing new, it having been of frequent use—as, for instance, in the springs of door locks; and it is also claimed by the defendants that it is nothing but the mere equivalent of the diamond barb of Kelly. But the use of such a coil for the purpose of a barb upon fence wire, and its combination with the other elements in this present structure, was new with Glidden. It is also true that the entire combination—this Glidden barbed fence wire—is a very simple thing, and it looks as though it was going a good ways to give to such a simple structure the rights and protection of a patent; but, simple, though it is, Mr. Glidden first introduced it to the world, and if it has been found of value in the uses of the world, it would also, on the other hand, seem as though he should be entitled to the benefit of the value of that which he has contributed.

* * * *

"It is true, when we take this structure to pieces, and examine its separate elements, as counsel have in their arguments, it has been to my mind at least, very difficult to say that any element was not found, substantially or nearly so, in some one or other of these prior barbed wires. Still, looking at it as a whole, it is unquestionably new, and I think must be held to be the product of invention rather than of mere mechanical skill. As, from time to time during my examination, I have looked at these models of the various forms of wire, I have been reminded of the story told in my early days of Rufus Choate and Daniel Webster. They were engaged in a trial in reference to some patent wheel. After Choate had, in an elaborate argument, noticed, as he thought, all the alleged differences between it and wheels in prior use, and showed that there was nothing to distinguish it from such wheels, Webster rose and said "If your honor please, there is the wheel." And the more I have looked at this model, the more I have been impressed that there was in this Glidden structure something new, something that required inventive skill to devise, and something that has made the structure of great utility."

In no sense can Glidden's invention be said to be only for a combination of known elements for the production of an old and known result, as stated by the Circuit Court in its opinion dismissing these bills of complaint. It entirely overlooks the fact that the invention expressed in the claim is an entirety, a composite structure as an article of manufacture so to speak.

That composite structure was new, both in kind and form. It did not exist before in any sense, patentable or otherwise. Its production involved invention, and in a strictly legal sense it was "patentable, novel." In the very recent case of *Magoun and others v. New York Belting and Packing Co.*, unreported, this Court had before it a very similar case to the present one. In that case the claim was for a packing termed the Gately packing, consisting of alternate layers of canvas and india-rubber with a pure gum backing, the whole vulcanized in one homogeneous mass and cut bias. Prior to Gately's invention a patent had been granted to one McBurney for a packing consisting of alternate layers of canvas and india-rubber, the whole vulcanized into one homogeneous mass and cut bias. All Gately did was to add to McBurney's packing a backing of pure gum which, when vulcanized, rendered the packing more elastic.

Said the Court, speaking through *Mr. Justice Blatchford:*

"The portion of the strip which is made according to the McBurney patent furnishes a wearing surface, the character of which always remains the same and is not altered under wear; and the pure rubber at the back furnishes an elastic backing, which serves always to keep the wearing portion of the packing in close contact with the piston-rod, when such pure gum backing is pressed upon by the gland of the stuffing-box. By this combination a new article results."

A new article in precisely the same sense that Glidden's combination resulted in a new article. Packing of course was old, but not the McBurney packing with a pure gum backing; that was a new article. So was barbed wire old as shown in the Kelly patent, but not with a barb formed of a short piece of wire coiled between its ends around one strand and held in position and place by the other strand, the two intertwisted, that was a new article. If the one was patentable surely the other must be.

Said the Court; "We think there was patentable invention in producing this article of Gately's in view of everthing put in evidence by the defendants, and in view of the McBurney patent. * * * * * * It is true that McBurney shows a part of the combination or article patented by Gately, and McLean shows a rubber backing; but the invention of Gately was new and patentable."

So it appears that not only were all the elements of the Gately combination old, but that the McBurney packing containing all but the gum or rubber backing and that was shown to be old in the McLean, yet the court said the result was a

new article distinguishable from the old and therefore patentable. Here then is a much stronger case, for not only is the result a new article at once distinguishable from the old, but the elements were not all old; the barb was new as well as the combination of the barb applied to one wire and held in position and place by the other wire, the two intertwisted together. Upon the question of patentability the court concluded:

"Within the requirements of Atlantic Works v. Brady (107 U. S. 192, 200) we think that Gately made a substantial discovery or invention, which added to our knowledge and made a step in advance in the useful arts; that, within the case of Hollister v. Benedict Mfg. Co. (113 U. S., 59, 73,) what Gately did was not merely the work of a skilled mechanic, who applied only his common knowledge and experience, and perceived the reason of the failure of McBurney's packing, and supplied what was obviously wanting, and that the present case involves not simply—

the display of the expected skill of the calling,

involving—

only the exercise of the ordinary faculties of reasoning upon the materials supplied by a special knowledge, and the facility of manipulation which results from its habitual and intelligent practice,

but shows the creative work of the inventive faculty."

Judged by that rule Glidden's invention of the compound wire structure of his claim is not lacking in patentability. The patent is prima facie evidence of the sufficiency of invention and patentability.

Seymour v. *Osborn*, 11 Wall., 516.
Leubender v. *Holthaus*, 105 U. S., p. 94.

A rule of law which seems to have been entirely overlooked by the learned District Judge, at least not applied by him in the consideration of these cases. Apparently he gave no consideration whatever to the presumption arising from the issuance of the patent and therein disregarded one of the well settled canons of this Court. The rule was stated and applied by Mr. Justice Bradley in the case of *Reiter et al v. Jones and Laughlin*, 35 Fed. Rep., as follows:

"It is contended that the making of the grooves was no invention; and that, if it was, they had been made and used before for precisely the same purpose. The fair questions to put, however, are, was there no invention in the whole thing taken together, the detachable crown or lid with the grooves and cells? And had such a crown or lid been made and used before? In answer to these questions the patent itself is prima

facie evidence in favor of the patentee, or of the complainants who represent him; and unless there is clearly no invention in what is claimed to be such, or preponderating evidence of anticipation, the patent should be sustained. I cannot say that there was clearly no invention in the thing patented. It is certainly a very useful contrivance, and has greatly facilitated the making of chains. It could not, therefore, have been a very obvious improvement, or it would have been adopted long ago."

It is equally well settled that the prima facie presumption arising from the issuance of a patent is greatly heightened by the fact that the patent office had before it and considered at the time of the issuance of the patent, the prior patents which are relied on as showing the state of the art in view of which there is said to be no invention. That rule was most admirably stated and applied by *His Honor Judge Shiras* in the case *Shaver v Skinner. Mfg. Co.*, 30 Fed. Rep., p. 68, although its application to this case, which was fully justified by the facts, seem to have been entirely overlooked.

Judge Shiras said:

"If the question was before me as an original one, with the burden upon the complainant of establishing, by satisfactory evidence, the patentable character of the combination, unaided by the presumption arising from the issuance of the Letters Patent, I should entertain grave doubts as to the conclusion to be reached. As the issue is however now presented, the complainant has the benefit of the presumption in his favor arising from the issuance of Letters Patent, which, prima facie, establishes the novelty of the invention therein described."

Seymour v. Osborn, 11 Wall., 516.
Smith v. Goodyear, 93 U. S., 486.
Lenbender v. Holthaus, 105 U.S., 94.

"The evidence also discloses the fact that in making the investigation into the novelty and utility of Shaver's claim required by the laws and rules governing the Patent Office, the Examiner submitted same to a rigid scrutiny, and comparison with the previous patents, which fact tends to strengthen the *prima facie* presumption arising from the issuance of the letters to Shaver."

The file wrapper and contents shows that the Kelly patent was before the Patent Office in the consideration which led to the issuance of the Glidden Patent in suit.

VI.

The great value and utility of Glidden's invention is established beyond all question. It was the birth of a new industry. Commencing in the small town of DeKalb, Illinois, in the latter part of 1873, its development has been truly wonderful, until at the present time it has reached every known part of the globe. It is at the present time the chief fencing material of the world. It has made possible in the way of fencing that which was never thought of before.

Said *Judge Drummond*, in the case of the *Appellants v. Haish*, 4 Fed. Rep., p. 909:

"Tested by the rule of utility here suggested, this record abundantly shows that the device in question has been accepted by the public to an extent which has hardly heretofore followed the most successful inventions. Its utility must be considered as a conceded fact. From what has already been developed, it is clear that it has made possible the cultivation of the extensive prairies of the west, the pampas of Brazil, and the steppes of Russia, where, before the introduction of this cheap mode of fencing, it was impossible; and it has, even to a great extent, already superseded the use of wooden fences in the timbered portion of the country; and the question is, to whom but these inventors is the public indebted for this widely useful device? * * * The proof shows that the final form of fence wire and spur which has been adopted for practical use is substantially that shown in the last Glidden patent."

Think of the manufacture and sale of more than 700,000 tons in the first twelve years of the industry, and you have some idea of its magnitude. A small quantity was manufactured in 1873, some 50 tons in 1874, about 1200 tons in 1875, 3000 tons in 1876, and in 1886, 44,000 tons of the exact form shown in the Glidden patent in suit manufactured alone by the appellants; more than one-third of all the barb wire manufactured and sold in that year.

The great superiority of Glidden's wire is evidenced by the fact that although it cost less to make, it brought and was in great demand at from one-half cent to a cent a pound more than any other style of barb wire,—including the Kelly—which were without numbers, yet all embodying Glidden's invention of the wire barb and manufactured under licenses from the appellants.

In considering a similar question this Court said in the case of *Magowan v. New York Belting & Packing Co. (ante)*:

"It is remarked by Judge Nixon in his opinion, as a fact not to be overlooked and having much weight, that the Gately packing went at once into such an extensive public use as almost to supersede all packings made under other methods; and that that fact was pregnant evidence of its novelty, value, and usefulness. (Smith v. Goodyear Dental Vulcanite Co., 93 U. S. 486, 495, 496; Loom Co. v. Higgins, 105 U. S. 580, 591.) It may also be added, that the evidence shows that the Gately packing was put upon the market at a price from fifteen to twenty per cent. higher than the old packings, although it cost ten per cent. less to produce it."

Of the utility of the Glidden wire *Mr. Justice Brewer* said in the case of the *Appellants v. Grinnell Wire Company*:

"Following also the lines of argument noticed by the Supreme Court in two or three cases where the actual result demonstrated the great utility, I may add that while such fact is not conclusive, yet it is fair matter of consideration in determining, in questions of doubt, the fact of patentability: and if we look at the history of barbed wire there can be but this one conclusion: that of all the structures and devices this has been the one that has met the want of the public. It is the barbed wire of almost universal use to-day."

In 1887 the appellants had fifty-two licensees, including substantially all the barb wire manufacturers in the United States, and its license tonnage reached the enormous proportions of 173,000 tons per annum. They reserved for themselves the manufacture of the exact form of Glidden wire shown in the patent in suit, regarding it as far superior to all other forms, and such it proved to be, for although sold at from one-half a cent to a cent more per pound than any other form, it was in such great demand and to such an extent that its manufacture amounted to more than one-third of the entire manufacture of barbed wire.

Of the Hunt and Smith wires substantially none were ever manufactured, and the Kelly wire was only manufactured by one party, with sales not exceeding 2,000 tons in any year, although the manufacturer of the Kelley wire paid no royalty and was not limited in the amount of its manufacture; the smallness of the amount being because of the impossibility to sell more.

Contrast the 2,000 tons per year of the Kelly wire with the 44,000 tons per year of the Glidden wire made alone by the

appellants, and you have some idea of the great value and utility of the Glidden wire over the Kelly.

Depositions of Washburn, rec. p. 775; Ellwood, rec. p. 459; Stiles, rec. p. 401; Brigg, rec. p. 423.

The great utility of the Glidden Wire over the Kelly wire, as well as over all other known forms, was most conclusively established by the appellees, in July, 1885, and after the expiration of the Kelly patent, and after the Glidden re issue for the barb *per se* had been decreed invalid, and the decree acquiesced in by the appellants, engaging in the manufacture of the Glidden Wire of the patent in suit in preference to all others.

It was open to them to make the Kelly wire free and unmolested, and Thompson, one of the appellees, testifies that they knew "the Hunt and Kelly and Smith patents had expired," (Record, p. 940. Int. 14), as well as some 300 other forms, as at that date there had been fully that many patents granted for different forms of barbed wire, yet they selected of all others the Glidden wire, and persisted in its manufacture in defiance of the patent, and in the face of litigation of the most expensive character. They took not the Kelly wire, but the Glidden wire. They seized upon it as the one thing of all else in the barb wire business that they regarded of value. Having taken the invention in its entirety, can they now be heard to deny its utility?

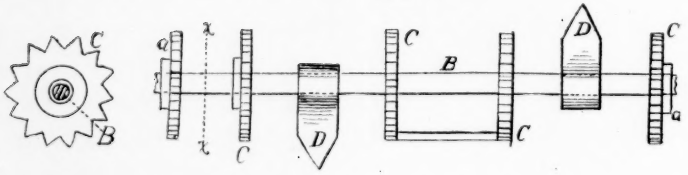
This Court has answered that question in the negative. In the case of *Lenbender* v. *Holthaus*, 105 U. S., 94, this Court said, speaking through the late *Mr. Justice Woods*: "The "patent is *prima facie* evidence of both novelty and utility, "and neither of these presumptions has been rebutted by "the evidence." * * * The fact that it has been infringed "by defendants, is sufficient to establish its utility, at least "against them." Also in *Western Electric Co. v. La Rue*, 139 U. S., p. 608.

And that rule was applied by His Honor *Judge Blodgett* in *Adams & Eastlake Mfg. Company v. Rathbone and others*, 23 Fed. Rep. 262:

"It is quite common for those who are appropriating the results of another's labor or inventive genius to attempt to belittle the device so appropriated, and insist that it required no exercise of the inventive faculty to produce it; but when we consider the state of the art at the time this inventor entered the field, as shown by the proofs in this case, it is quite evident that no one had hit upon the Mitchell idea of fastening the chimneys between the two plates, and utilizing the upper plate

as a stand on which the cooking utensils were to be placed; and when the Mitchell patent had instructed the world as to the especial adaptation of this arrangement to the purposes of oil stoves, it seems to have gone into general use. That it was

HUNT



manufacture may in some cases be regarded as of importance when the inquiry is, whether the process or manufacture exhibits invention, thought and ingenuity. Webster, on the subject matter of patents, page 36, says: 'The utility of the change, as ascertained by its consequences, is the real practical test of the sufficiency of an invention; and since the one cannot exist without the other, the existence of the one may be presumed on proof of the existence of the other. Where the utility is proved to exist in any degree, a sufficiency of invention to support the patent must be presumed.' We do not say the single fact that a device has gone into general use, and has displaced other devices which had previously been employed for analogous uses, establishes in all cases that the latter device involves a patentable invention. It may, however, always be considered; and when the other facts in the case leave the question in doubt, it is sufficient to turn the scale.''

Judged by that rule the defence of insufficiency of invention would seem to be without the least support.

Loom Co. v. Higgins, 105 U. S., p. 591.
Valve. Co v. vCrosby Valve Co., 113 U. S., p. 179.

VII.

The prior state of the art, in view of which it is said Glidden's invention is lacking in patentable novelty, is to be found in the prior patents to-wit: To Smith, No. 66,182 of June 25th, 1867, (Rec. p. 2004); to Hunt, No. 67,117 of July 13th, 1867, (Rec. p. 2003); to Kelly, No. 74,379 of February 11, 1868, (Rec. p. 2000); and to Kelly, No. 84,062, of November 17th, 1868, (Rec. p. 1998); and in the alleged prior structures of Morley and others.

In none of those prior patents do you find the composite structure of the claim of the Glidden patent nor the wire barb of that structure. It is only necessary to compare the Glidden structure and barb with those prior structures to be convinced that the difference between them involved invention and to a degree far beyond what this court has held to be more than sufficient to sustain a patent.

The Hunt patent shows a single wire with spur wheels strung upon it, which spur wheels are made of sheet metal.

The Smith patent shows a single wire with spools of iron or wood strung upon it, which spools are provided with four short pieces of wire projecting radially. The spools are prevented from sliding laterally by kinks in the wire, but are free to rotate.

Fig. 1

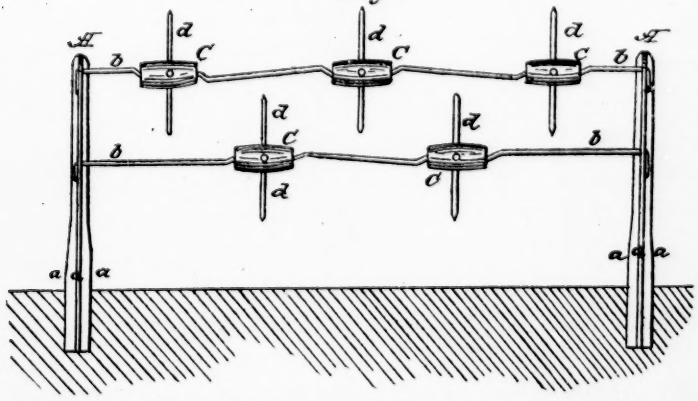
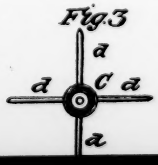


Fig. 2

Fig. 3



The Kelly patent shows a single wire with diamond shaped sheet metal thorns strung upon it. The thorns are cut from a plate of sheet metal and pierced in the centre, and after being strung upon the wire are fixed in place by being compressed laterally upon the wire by a blow of a hammer or otherwise so as to flatten the hole in the centre through which the wire passes and also correspondingly flattening the wire at the point where this adjunct is to stand.

Fig: 1.

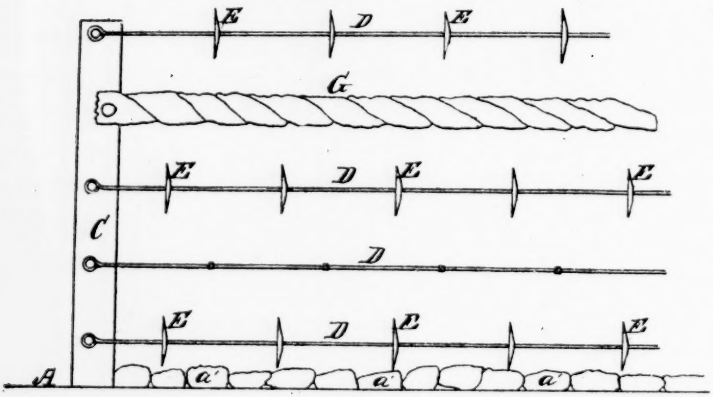


Fig: 2.

Fig: 3. *Fig: 4.* *Fig: 5.* *Fig: 6.*

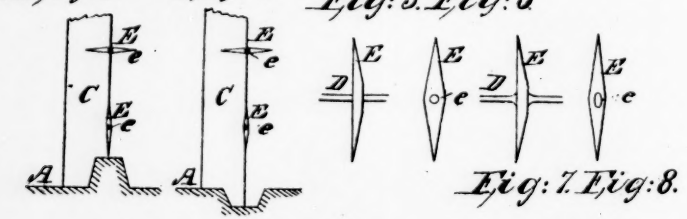


Fig: 7. *Fig: 8.*

Such was Kelly's structure. After he had constructed it, he said: "I can, where it is desirable to increase the strength of "the wire, lay another wire of the same or different size

" alongside of a thorn wire, and can twist the two together by " any suitable mechanism."

The use, then, of the second wire was simply as a strengthening wire. It was not relied on, and did not, and could not, in point of fact, clamp the thorns in position and place.

In Kelly's structure the thorns were secured in position and place before the application of the second wire, and the effect of the twisting of the two together was simply to block—that is, limit the lateral as well as the rotary movement of the thorns.

Mr. Justice Brewer, then the Circuit Judge, in the case of the appellants against the *Grinnell Wire Company*, 24 Federal Reporter, p. 23, sustained the Glidden invention in the light of the foregoing prior patents, and *Judges Blodgett* and *Drummond* in the case of the *Appellants v. Haish*, 4 Fed. Rep., 900, likewise sustained the patentable novelty of Glidden's invention of the wire barb or spur wire in the light of the same prior patents.

In none of the alleged prior structures of Morley and others do you find the composite structure of the claim of the Glidden patent except it may be in the Beers case. The attempted establishment of their existence is for the purpose of showing that Glidden was not the inventor of the wire barb and in that way to detract from the character of his invention and at the same time add the wire barb to the state of the art as exhibited in the above-mentioned prior patents.

The Morley Delhi Fair Fence. Claimed to be a panel of fence, in length, anywhere from ten to twenty-five feet, that was exhibited at the Delhi Fair by one Alvan Morley prior to 1862. Year very uncertain; by some said to be in 1858; by others in 1859, by others in 1860, and by still others in 1861. To have been made of three or four strands of single wire and a board, the wires attached at their ends to, some say, posts in the ground; others to a post and a tree, and still others to two posts and a tree; that the top wire had barbs on formed of short pieces of wire wrapped around it, some say once, others say twice, and still others three times; the other two or three strands of single wire were without barbs. Beneath the top wire with the barbs on was a board, secured some say to the posts and others suspended by wire from the top wire strand. It was put up on the second day of the fair and exhibited the one day, as it appears the fair only continued two days. No one knows what became of that panel, nor of the barb wire upon it. It was never seen after the fair. Such is the Morley

Delhi Fair Fence as claimed by the appellees, and it is attempted to establish its existence by the testimony of twenty-four witnesses, all of whom testify solely from recollection as to the construction of the fence which they saw only at the fair, and of those twenty-four, six of them testified in the case against the Grinnell Wire Co. *Contra* the appellants' examined nineteen witnesses, eight of whom attended the Delhi fair and must have seen the fence if it was there, as they say it was not.

The Morley Travelling Cow-pen.—Claimed that Morley in—some say 1861 or 1862, others earlier, others later, and still others prior to 1866—put barbed wire of the same construction as that used at the Delhi fair around a travelling cow-pen, which he constructed and put, some say, on his land east of town, near Eronimous, others at his saw-mill. That the cow-pen, in which the cow was placed so as to move it along in grazing, was triangular in shape and composed of posts and boards supported on wheels, one at each corner, and that the barbed wire was, some say, a single strand put on the top of the posts over the boards, and others two strands placed between the boards. That it was simply seen by the witness and then disappeared; what became of it no one knows, nor does any one know the extent of its use. On July 10, 1866, Morley obtained a patent for his travelling cow-pen (Rec., p. 1958) in which is neither shown nor described barbed wire; it forms no part of its construction, and its use was not even suggested.

This use is attempted to be established by the testimony of eight witnesses, two of whom are of those who testified to the fair fence; all of whom testify solely from recollection as to the construction of the wire which they say they saw but once and only in passing by.

Contra the appellants examined seventeen witnesses, twelve of whom saw the cow pen, and testify that there was no wire upon it.

Morley's north farm, east line, and south line road fences.—Claimed to be a post and 3 high rough board fence, except at two or three, some say three or four, stony places where they could not well put posts, over which three single strands of wire with barbs on, same as fair fence, were stretched. Distance of barbs apart variously stated and as far apart as a foot to 15 or 16 inches; distance of places on fence covered by the wires given by some as from 2 to 3 rods; by others from 2 to 5 rods, and by still others as, one place the distance across the road and the other not so long. In a place or two, were boards

were loose or broken out, a single strand of wire was run. Time very uncertain; said to be in 1861 or 1862; three or four years after the Delhi fair, in 1865 or '66, or prior. The fence was entirely removed in 1867. This was an interior fence and away from the road, although two witnesses says there was some along the south line road fence.

To establish this use the appellees examined eleven witnesses, all of whom testify solely from recollection, and, with one exception, their testimony is based upon having seen the fence only once. Of those eleven, three testified as to the fair fence and four as to the cow-pen. *Contra* the appellants examined seven witnesses, including the owners of the adjoining property, none of whom ever saw or heard of barbed wire on those fences.

Morley's South Farm Road Fence.—Claimed to be a post and board fence on which at two or three places between posts, where boards were broken off, barbed wire was put on similar to Delhi fence wire, also claimed to be a fence around a hog lot covering from an acre and a quarter to acre and half composed of post and bottom board with two wire strands barbed that went round the yard; location of lot 6 or 7 rods from house. And that similar barbed wire was seen along side of the celler and in the straw shed between 3 and 6 strands from 12 to 16 feet long; time very uncertain, said to be in 1862 and prior to '65.

This use is attempted to be established by five witnesses, all of whom testify solely from recollection. Of these, three testified to the fair fence; two to the cow-pen and one to the north farm fence. Their recollection is based largely upon seeing the wire only once. *Contra* the appellants examined twelve witnesses, including the adjoining land owners and parties who were on the land and examined the fence, all of whom deny the presence of barbed wire on the south farm.

Morley's Wire at the Mill.—Claimed that Morley made some few strands of wire at the mill and had wire on cow or calf pen, the same pen as referred to before. No one knew what became of it. Time very uncertain, anywhere between '59 and '65.

It is attempted to establish this by the testimony of six witnesses, all of whom testify solely from recollection. Of the six, two testified to the fair fence, three to the cow pen, three to wire at the north farm, and one at the south farm. which is based upon seeing wire at mill only once. *Contra*

the appellants examined seven witnesses, all of whom were at the mill within the years it is claimed the wire was there, and they testify it was not there.

The foregoing is all that is claimed for the alleged Morley fences and it is stated with great accuracy. What a showing even considering it to be true, which it is not. Confessedly it was not the Glidden structure.

Long Fence.—Claimed that one Long, of Delaware County, Iowa, in the summer of 1873, took common fence staples and wrapped them around the plain wire strands of a fence around a feed yard covering about an acre and a half of ground; that there were two wires around the feed yard, at least on the one side, on which these staples were put, but how many and exactly where does not appear. That some staples were also put on a wire forming part of the fence on said road, and on a wire on the south side. This is all that is claimed for the so-called Long fence.

In support of this fence seven witnesses were examined by the appellees, including four members of this Long family, and they fix the dates given entirely by recollection. *Contra* the appellant examined twelve witnesses, including the adjoining landowners, those who worked on the Long farm and those who were familiar with the fences, all of whom fix the date of the use of the wire testified to by the Longs as subsequent to the date of the Glidden invention.

Stone or White Estate Fence.—Claimed that Stone, of Delhi township, Delaware County, Iowa, in the spring of 1872 at five different places along the east and south fence, which was a five-strand smooth wire fence, on the quarter section west of the poor farm, put fence staples for barbs; that he put from forty to fifty at each place and on different wires, but most of them on the middle wire. The fence remained up but a short time.

The appellees attempt to establish the existence of this fence by the testimony of fifteen witnesses, every one of whom testifies entirely from recollection. Of those, seven testified in the case against the Grinnell Wire Co. as to the existence of the same fences. *Contra* the appellants examined nine witnesses, including the occupants of the adjoining lands and those who were familiar with the fences on the White estate, every one of whom testify that they have no knowledge of any barbed wire used on the fences of that estate, as testified to by Stone.

Manchester Fair Fence.—Claimed to be a single wire fence with barbs on, exhibited at the Manchester Fair about 1870. Amount uncertain, said to be two or three lengths; also 30 feet; also that fence was of two or three strands; also that it was a single strand. Barbs attached in some way; how, uncertain and also said to be of wire wound around. Not known whose fence it was, how it came there or what became of it. It is attempted to establish this alleged prior fence by the testimony of four witnesses, two of whom had no occupation, —one a furniture dealer and the other a farmer, and their testimony is given entirely on recollection. They know nothing of the fence save that they saw it at thefair. *Contra*, the appellants likewise examined four witnesses, consisting of an officer of the fair, a newspaper editor and reporter, an exhibitor, and one who examined and produced the books of the fair, by whom it is shown that the alleged fence had no existence.

Hutchinson Fence.—Claimed that prior to 1870 the two Hutchinson boys—cousins—put barbs of wire like staples, on a plain wire fence over a creek-way or water run, on an east and west line fence on the south side of the farm and that the wire or staples were wrapped once around the wire strand; also that like barbs were put on a fence over a "dry run."

As to this fence the appellees examined four witnesses, all of the Hutchinson family, who gave their testimony from recollection alone. *Contra*, six witnesses were examined by the appellants, including the merchant from whom they claimed to have purchased the barbs, and the adjoining property owners, from which it is made certain that no fence was ever constructed as claimed by the Hutchinsons.

Beers Fence.—Claimed to be part of a fence on the Beers farm, near DeKalk, between 1857 and 1860; that there was a single wire, with barbs twisted around it, on what formed a part of a fence around a hay stack on the east side of the barn; also that there was a double wire with the barb on one wire and the two wires twisted together; which formed part of a board fence between a cow yard and hay stack, and that the barb wire was between the top and second board of the fence, the wire extending along for several panels, probably in all three, four or five rods. The fence did not remain up long and the wire disappeared. The alleged maker of the wire fence is not called, and it is attempted to establish it by the evidence of his brother and four others, all of whom testify from

recollection alone. *Contra* the appellants examined nine witnesses. These alleged Beers wires were before *Judges Drummond* and *Blodgett* in the cases against Haish and against Beer, wherein Beer, the alleged maker of the fence, was examined and were rejected by them as not sustained by the proofs. In these cases the appellants produce the specimen of wire which when examined in the above cases Beers produced as being of the wire made by him in 1859, and show that the wire of which it is made could not have been obtained prior to 1870.

It is not contended that any of the alleged prior fences, or, more properly speaking, wires, were ever manufactured other than as above claimed, and it is conclusively shown that none such were sold or manufactured or offered for sale. In every case, even upon the appellees showing the use was confined to the party who it is claimed made the wires and at the points where it was made. In no case was a fence in the true sense made, the use of the wires, if established, being limited to short pieces, used most in out-of-the-way places for patching holes in fences and as parts of a panel or two in connection with plain wire or boards. Such a thing as a complete fence being made of any of the alleged wires is not and upon the proofs cannot be contended. Indeed, all the alleged wires put together did not amount to enough to make a complete fence of a half a dozen rods.

VIII.

The prior state of the art rests solely upon the prior patents offered in evidence, as the appellees have failed to establish the existence of the alleged prior fences.

The rule is, as stated by this Court in *Coffin v. Ogden*, 18 Wall., 120, that "The burden of proof rests upon him (the defendant), and every reasonable doubt should be resolved against him." Judged by that rule, the appellees have utterly failed in their attempt to establish the existence of any one of the alleged prior fences, for it is impossible to say, from a reading of the proofs offered in support of the prior existence of such fences, that any of them is established beyond a reasonable doubt.

A reading of the proofs not only creates a grave doubt as to the existence of the alleged prior fences, but leaves the firm conviction that they never existed.

As said *Mr. Justice Blatchford*, then the District Judge sitting at the Circuit, in *Hitchcock* v. *Tremaine*, 9 Blatch., p. 552:

"This is one of those cases, so often met with in the history of patents, where an invention, once perfected, has shown itself to be so useful and so highly appreciated as to have gone at once into extensive use, that it is inherently impossible it should have been known before, and not have gone into general use. Its success leads infringers and rival inventors to set up crude and unsuccessful experiments as anticipating it, and dim recollections are stimulated, and conscience strained, to clothe with living flesh what was an inert and useless skeleton."

Even that view of the attempt in these cases to establish the existence of the alleged prior fences is most charitable to the appellees.

They have not sustained the burden required by the rule, for instead of removing all reasonable doubt, they have created a doubt of the gravest character, a doubt that will cause any one to hesitate, and as said *Mr. Justice Strong* in *Parham* v. *American Button Hole Machine Company*, 4 Fisher, 468, "to doubt upon this point is to resolve in the negative."

The question is not have the appellants overthrown by their proofs in rebuttal the existence of the prior fences as established by the proofs offered to support them, but have the appellees established their existence beyond a reasonable doubt. Unless and until they have, the question as to the effect of the proofs offered by the appellants in rebuttal is of no moment, for that indeed is a very different question from the question of the establishment of the existence of the alleged prior fences beyond a reasonable doubt as the rule requires. That burden is on the appellees and must be sustained without reference to any proofs offered by the appellants inrebuttal.

Said this Court in *Cantrell* v. *Wallick*, 117 U. S., p. 695, speaking through the late *Mr. Justice Wood:*

"The burden of proof is upon the defendants to establish this defence. For the grant of Letters Patent is *prima facie* evidence that the patentee is the first inventor of the device described in the Letters Patent and of its novelty. *Smith v. Goodyear Dental Vulcanite Co.*, 93 U. S., 486; *Lehnbeuter v. Holthaus*, 105 U. S., 94. Not only is the burden of proof to make good this defence upon the party setting it up, but it has been held that every reasonable doubt should be resolved against him."

Coffin v. Ogden, 18 Wall., 120, 124.
Washburn v. Gould, 3 Story, 122, 142.

In the case of the *American Bell Telephone Co. et al.* v. *People's Telephone Co.* and others, 22 Fed. Rep., 309, where it was attempted to establish the prior existence of the alleged Drawbaugh telephone by the testimony of nearly 200 witnesses, his Honor, *Judge Wallace*, stated and applied the rule as announced by this Court in *Coffin* v. *Odgen* and *Cantrill* v. *Wallick*, as follows :

" The complainant starts with the benefit of the presumption of law that Bell, the patentee, was the inventor of that for which the letters patent were granted him. Whoever alleges the contrary must assume the burden of proof. Evidence of doubtful probative force will not overthrow the presumption of novelty and originality arising from the grant of letters patent for an invention. It has been frequently held that the defense of want of novelty or originality must be made out by proof so clear and satisfactory as to remove all reasonable doubt. Washburn v. Gould, 3 Story, 122 ; Smith v. Fay, 6 Fisher, 445 ; Hawes v. Antisdell, 2 Bann. & Ard., 10 ; Patterson v. Daff, 20 Fed. Rep., 641 : Wood v. Cleveland Rolling Mill Company, 4 Fisher, 560 ; Parkham v. American Buttonhole Co., Id., 482. In U. S. Stamping Co. v. Jewett, 18 Blatchf., 469. S. C., 7 Fed. Rep., 869, Blatchford, J., said the defendant had not fulfilled ' the necessary obligation of showing beyond any reasonable doubt ' that Weber (the alleged prior inventor) was prior to Heath (the patentee.) In Coffin v. Ogden, 18 Wall., 120, Mr. Justice Swayne, delivering the opinion of the Court, stated the rule applicable to the defendant, as follows :

" The burden of proof rests upon him, and every reasonable doubt should be resolved against him."

which rule was approved and applied by this Court in the consideration of that case on appeal, 126 U. S.

As to the true rule and its proper application to these cases, there would seem to be no doubt. That it was not applied by his Honor *Judge Shiras* is evident from a reading of his opinion, since his own statement of the proofs to support the existence of the alleged Morley fence creates much more than a reasonable doubt in the mind of any one accustomed to the weighing of testimony of that character, and even the learned Judge found it necessary to offer an explanation, in the form of a solution as to the alternatives presented by the proofs offered on the part of the appellees.

In view of the statement in *Judge Shiras'* opinion (Rec., p. 41), in reference to the alleged prior fences, other than that of the Morley : " On the other hand, if the evidence in support " of the Morley invention is insufficient to establish a case of

"prior use, then it would be useless to claim that there was "sufficient evidence to establish such priority in any of the "other instances named," which is undoubtedly a correct conclusion as to the other alleged prior fences, little attention need be given to such fences, especially as they are all, other than the Beers', admitted to be of the same construction as the Morley, namely, a single fence wire with barbs coiled around it.

This claimed Morley fence was before *Mr. Justice Brewer*, in the case against the *Grinnell Wire Co.*, 24 Fed. Rep., 23; and as to which he then said:

"The Delhi County Fair discloses this state of facts: That about 1858 or 1859, some 25 years ago, at a county fair held at the county seat, there was exhibited a fence, which, according to the recollection of some of the witnesses, consisted of three strands of wire, on which were fastened barbs like those on the Glidden, and also a board below the wire for the purpose of attracting the attention of the cattle. While several witnesses testify to their recollection of such a fence, and the similarity of the barbs thereon to the Glidden style of barb, other witnesses, including therein the officers of the fair association for those years, have no recollection of anything of the kind. That, of course, in to some extent negative testimony; yet of value. Then there is a line of testimony to show that there was a model of a fence, essentially different from anything in controversy here, circulated in that vicinity and exhibited at that fair. But take the testimony of the defendants alone in reference to the fence. Can you rely on the recollection of witnesses reaching back over 25 years as to the particular form in which a fence seen but for a day or two was constructed? It would be strange if that recollection was so clear and distinct as to the manner in which those wires were barbed or protected by prickers, that the Court would be justified in relying very much thereon. The infirmities of human memory are such that it does not seem to me that, even if there was no contradictory testimony, their testimony alone would enable the Court to say that it was clear that away back in 1858 or 1859, somebody—who he was is not disclosed, and when he came, or whither he went, nobody knows—presented there a model of a fence with the combination contained in the Glidden patent. I did not have any trouble with that question."

Nor will this Court have any trouble with that question. It still rests entirely upon the recollection of witnesses, no two of whom seem to agree upon any one point except that they saw at the Fair a wire strand with barbs on it. It would

indeed be remarkable if parties seeing a fence only for a few minutes in passing at a fair, and without giving it very close examination, could remember 25 years thereafter exactly how it was constructed and how the barbs were applied. Especially when it appears that all recollection of the fence had entirely passed from the minds of the witnesses and was only recalled in connection with the giving of their testimony in these cases, and that too more than ten years after barb wire had gone into universal use, and had with few exceptions been used extensively by them. Still more remarkable that this Morley fence as well as all the other alleged prior fences, except the Beers', should come from Delaware County, Iowa, wherein resides the appellees. That in itself creates a grave suspicion, which is greatly heightened when you consider that barb wire litigation has been notorious since 1877, extending to every part of Iowa, and yet not a word from any of the witnesses as to the existence of any one of these alleged Delaware County fences until required by the necessities of these cases and to help tneir neighbors and old friends, except the Stone and Delhi Fair fences, which were first developed in the case against the Grinnell Wire Company in about 1884, and even then not a word was said as to the alleged Long, Hutchinson, Manchester, Fair and Morley farm fences.

Now, if they did exist, as claimed, is it not indeed most remarkable that they were not mentioned in the Grinnell case when witnesses were being looked up and examined in their very midst? All human probabilities are against the existence of those Delaware County fences. *Mr. Justice Brewer* having said, in speaking of the Delhi Fair fence "who he—the maker—was is not disclosed, and whence he came or "whither he went nobody knows," the appellees in these cases proceeded to supply that deficiency, hoping thereby to overcome the effect of the decision. If the testimony is to be believed it was universally known in the community who was the exhibitor of the Fair fence, for they were able to produce more than a score of witnesses, all of whom said it was Alvan Morley, a well known character in their midst, and yet of all the witnesses in the Grinnell case, all of whom lived in the same neighborhood, not one of them knew who the exhibitor was, nor could anyone then be found who did know. When, however, it came to these cases, everyone knew and they find them by the score.

Said this Court in the case of the *Clark Thread Co. v. Willimantic Co.*, 144 U. S., p. 488, speaking through *Mr. Justice*

Bradley: "No person accustomed to weigh the credibility of "human testimony can fail to perceive the stress under which "this evidence was given."

So in weighing the evidence in these cases as to the Morley fence, the stress under which it was given will be apparent; so apparent as to entirely discredit it. While the witness testified that Alvin Morley was the exhibitor, and when he came and whither he went, none testifies what became of the fence. The chief witnesses relied on as to the Delhi Fair Fence may be said to be Bates (Rec., p. 1321); Dubois (Rec., p. 1498); and Potter (Rec., p. 1222).

Bates, of no occupation, but a blacksmith by trade, and a friend of the appellees, Hoags and Thompson, testifies that he attended a fair at Delhi prior to 1861, at which Alvin Morley exhibited a panel of wire fenc. "It was put on a tree at one "end, a post at the other, and a stake in the middle" "There "was three wires; the top one was barbed about--I should "think the barbs were about 8 to 10 inches apart; as near as "I can recollect, a few barbs were on the second wire." "There was a piece of board about 3 to 4 inches wide;" suspended from the top wire. I helped Morley to put the fence up on the "second day of the fair. Morley made the barbs, "and cut them off with a cold chisel, I should think."

"18 Int. Was anything done to them after they were cut off with a cold chisel?

Ans. I should think they was either filed or ground a little; they were slanted a very little."

It would appear, then, that he had nothing to do with preparing the wire for the barbs, for he says, "I should think" the barbs were cut off with a cold chisel, and either filed or ground. "The wire was heated with a wood fire in order to— "it, and enable it to twist around the wire. The barbs were "put on with two irons with holes through them." The barbs "were bent on." "I would not swear positively whether twice or three times." "I made the tools that the barbs were "put on with. Made in 1858 or 1860, shears for Morley for "cutting his barbs." Don't know what became of the tools, but he makes duplicates and produces them. Has not seen any of the Delhi Fair fence since the Fair. He identifies the Potter specimen. "I cannot swear that it is the same wire, but it is "as like as I could go to work and make a piece now." The panel at the fair was 16 or 18 feet long. The whole top was barbed; the balance of the wires were not barbed, as Morley "did not take barbs enough." "He did not have the barbs for them." So that the panel of fence, 16 or 18 feet long, was put

up by Morley on the second day of the fair, and the barbs put on the top wire by Morley and Bates. Bates don't say where the materials for the fence came from, nor how he came to be at the fair.

On cross examination, he testifies, "I won't say whether it was in 1858 or 1859 that I helped him put up that fence in Delhi. I am not positive about it," and that was near as it was possible to get him to fix the date of the fair. He could remember the exact construction of the barbs and the details of the fence, but not the year. He cannot tell when he made the irons which were used in putting the barbs on, only that it was surely before the fair, and before that he never heard him —Morley—speak of the barb wire.

82 x Int. "Whereabouts did you and Mr. Morley make this barbed wire for the fair?

"Ans. In Delhi.

"83 x Int. Whereabouts did you put the barbs on?

"Ans. On the wire on the fair ground.

"84 x Int. How came you to help Mr. Morley do this, and what was his object in doing it?

"Ans. I happened to do it because he asked me to help him. I did not ask him his object—what he was doing it for. I supposed he was doing it to show folks what he could do.

"85 x Int. How were the barbs prepared before putting them onto the wire?

"Ans. They were cut off and either ground or filed the points of them a little; I don't know which."

Again showing that he knew nothing about the preparation of the wires out of which the barbs were made.

"86 x Q. What else was done to them?

"A. Heated so they would bend.

"Q. Where were they heated?

"A. In a fire down to the mill."

Which would indicate that he knew that as a fact, but by a subsequent answer he admits that not only had he nothing to do with the preparation of the barbs, but knew nothing about them.

"91 x Int. Where were the barbs cut and prepared and where did the wire come from and who brought it onto the ground?

"Ans. The barbs, I don't know where they were cut. Morley had them cut himself. He might have brought it from Penn-

sylvania when he come or he might have got the wire in Delhi or Manchester. Morley brought it onto the grounds."

Nor does he know how the materials came onto the ground. His knowledge of the fair fence is limited to his assisting Morley in constructing it. If the barbs were heated they must have been heated on the fair ground, which is not pretended, or else Bates knows nothing about it, and was testifying from his imagination, for surely there can be no doubt in view of his last answer, that he had nothing to do with the preparation of the barbs. He helps string the three wire.

" 94 x Int. I asked how ?

" Ans. There was a spike driven into the tree and the wire bent around it. The post the same. There was a point in the centre, or a stake, rather, you might call it.

" 95 x Int. How was it to the stake ?

" Ans Two nails driven in so the heads held it on, a nail each side the wire."

" I don't know how long it took us ; we put it up so that " we got it done about noon or a little after." Now, as it is undisputed that the fair terminated the second day, the fence was at most only on exhibition half a day. He cannot say, other than Morley, who was there when the fence was put up, and he left as soon as it was up and never saw it afterwards.

" 103 x Q. Do you know what was done with it after the fair closed ?

" A. No, sir ; I don't know but it is there yet."

He does not remember what Morley paid him, as he kept no memoranda. It is evident from a reading of his testimony that he is a man not of the bookkeeping kind. In fact his testimony justifies the conclusion that he is more of a tramp than anything else. He cannot even say where he lived when he put up the fence. " I went down there— " to the fair—Morley had his wire, his barbs cut and his " irons to put them on with and wanted me to help him " put them on and I did." From which it would appear, that his assisting Morley at the fair was purely accidental. " I think the fence was put up in 1858 or 1859 or 1860. I won't swear positive which year it was." " It might have been put up in 1861 ; I won't swear positive."

He left the fair as soon as the fence was put up, "There was nothing there to interest me " and he did not go back.

"302 x Q. You stated in your direct-examination that Morley used a wood fire in preparing those barbs for the fair fence when he prepared them at the saw mill; how do you know that?

A. Because I showed him how to do it,"—there contradicting himself on a very material point for he said in answer to the 91st cross interrogatory, as well as in other answers that he knew nothing about the preparation of the barbs; "that he" (Morley) "might have brought them from Pennsylvania when he came," although he knew that Morley had been some years away from Pennsylvania. He had not talked with any one about the fence since the war until "maybe two weeks ago."

Nothing could be more uncertain than this witness' testimony. He cannot give dates; he contradicts himself on material points; he cannot give names of parties who were at the fair; he knows nothing about the fence or barbs composing it except that he helped Morley construct it; he cannot say if any one saw or examined the fence nor what became of it. According to his testimony the fence was not up until a little after noon of the second day and only the top strand was barbed, with a few barbs on the second strand, with a board suspended from the top strand. If this panel of fence was, as the witness says, constructed by himself and Morley on the fair ground taking until a little after noon, it is indeed strange that no one saw them and yet not a witness is produced who saw them or any one else constructing the fence.

The witness is totally uncorroborated as to his construction of the fence and it stands upon his testimony alone, and unless his testimony is to be accepted as true, then there is no evidence in the case as to who constructed the fence on the fair or when or where it was constructed.

The testimony of the appellees' witness, John Dubois, establishes almost beyond question that the fence was not constructed on the fair ground as stated by Bates. Is it not far more probable than one seeing the fence constructed would be more likely to remember it than would one seeing it only in passing, and yet no one apart from the witness Bates knows anything whatsoever of its construction. It will be seen that this witness is contradicted by other of the appellees' witnesses as to the location of the fence, the character of the fence, the length of the fence and the time the fence was on exhibition; furthermore, Dubois' testimony, as above stated, completely negatives the testimony of Bates as to the construction of fences.

Dubois (Rec., p. 1498), a farmer living near Delhi, Delaware County, Iowa, and a friend of Hoags, testifies that in "1859 "or 1860; I won't be positive; I think 1859," he attended a fair on the Stone land where he saw a wire fence on exhibition.

"A. Why, as near as I can remember, it was a large wire. It seems to me it was larger than we have now, and the barb part was the same size as the other wire. The main wire was large wire, and the barb part, the part that went around the other, was the same size as the other.

"11 Q. How was the barb fastened to the other wire; what fastened it to the other wire, held it to it?

A. If I remember right, it was just wound right around it.

"12 Q. How did the ends of this wire wound around the main wire stand with reference to the main wire, and about how long were they?

"A. They stood kind of crossways this way, the length of them; I can't say how far they stuck out from the other wire."

"15 Q. Did you see any one with the wire on the ground that was exhibiting it and apparently calling the attention of the people to it; and, if so, who was it?

"A. Why, I saw Mr. Morley, a man we used to call Crazy Morley; I saw him there with it. He brought it to my house the night before; stayed at my house the night he came down."

It is evident that the testimony of this witness is given entirely from recollection, for he says "as near as I can remem-"ber;" "if I remember right;" "I can't say," &c., and on cross-examination he admits it. But of one thing he is certain and that is that Morley brought his barbed wire to his house "the night before" the fair, and remained with him all night and went the next morning to the fair, taking his wire with him. He places this beyond all question on his cross-examination———:

"1 x Int. As I understand you, this Crazy Morley stayed at your house in Delhi the night before he exhibited his barbed wire at the fair, and had his barbed wire with him. Is this correct?

A. He came there that night. It must have been 8 o'clock in the evening, or as late as that, and he took and rolled it up; had a string around it, I think, and he wanted to know of me if he could leave that till morning. Then he says, I guess I will stay with you, and I let him stay there.

2 x Int. Was this barbed wire that he brought to

your house and left there over night the same barbed wire that you saw made up into a fence at the fair the next day?

"A. Why, it looked like the same.

"3 x Int. How long was this barbed wire fence that Crazy Morley put up on the fair ground?

"A. Why, I should think somewhere from 16 to 25 feet, as near as I can remember now.

"4 x Int. How many barbed wires high was the fence, and was there anything forming the fence besides the barbed wire?

"A. I don't remember now. I can't say whether it was fastened to a tree, one end to a tree, or two posts; I can't say. It was so long ago I can't say whether there was anything else on it or not.

"5 x Int. Was all the barbed wire that Crazy Morley had at your house that night on that fence at the fair ground the next day?

"A. Why, I could not say as to that. I should think it would take as much as that to reach where he had it, but I can't say whether it was all there or not.

"6 x Int. Did you examine the barbs the night before while he was there at your house, so that you knew how they was formed on the wire?

Ans. Why, not particularly more than he was showing it to me and we were talking about it at that time. I know I thought it would be dangerous for stock; was the first I ever saw."

So, then, Morley made his barbed wire before going to Delhi, took it with him to Dubois' house, where he remained all night and went with it from there to the fair the next morning, where he put it up, for Dubois says that the barbed wire which he saw at the fair the next day "looked like the same" wire that Morley had at his house and showed to him the night before. According to Dubois, Morley must have brought with him considerable of the wire, for he says "he took and rolled "it up, had a string around it," and said, when asked:

"5 x Int. Was all the barbed wire that Crazy Morley had at your house that night on that fence at the fair ground the next day?

"Ans. Why, I could not say as to that. I should think it would take as much as that to reach where he had it, but I can't say whether it was there or not."

Thereby implying doubt if the fence (somewhere from 16 to 25 feet) which he saw on the fair, took all the wire which Morley

had at his house the night before. Although Dubois is able to testify as to the construction of the barbed wire, he cannot say how many wires length the fence was, nor how it was fastened, whether "to a tree, one end to a tree, or two posts," nor if there was anything else on the fence other than barbed wire. The inference from his testimony is that the fence was entirely of barbed wire. Remarkable that he should remember the construction of the barbed wire and not be able to say, if there was a board on the fence 3 or 4 inches in length suspended from the top wire, as many of them say there was.

Dubois' testimony completely disposes of Bates' story that the barbed wire was made on the fair grounds by himself and Morley, and not finished until a little after noon. It is beyond belief that Morley would have made in advance a roll of barb wire and taken it to the fair and then, not only not have used it, but gone to the trouble and expense of making other wire, as well as delaying his exhibit until after noon of the last day of the fair. Why should he not have used the wire which he made in advance and for exhibition, and presumably with great care, as he could have taken it to the fair for no other purpose especially as Bates says only the top wire was barbed, with a few on the second wire, as Morley did not take barbs enough. He did not have the barbs for them." Another remarkable fact is that none of the witnesses testify to seeing barbed wire at the fair other than what was on the fence, so if Bates' testimony about the making of the wire is true, pray what became of the wire which Morley had at Dubois' house and took with him that morning to the fair? Furthermore, how about the tools and plain wire which Bates says Morlly brought with him to the fair, for he does not appear to have had them at Dubois' house? If he had the tools at the fair he would at least have had them at Dubois' house, for according to Bates he had them at the mill and must, therefore, have taken them to Delhi with him, or elsehow did he get them to the fair? There is no escape from the conclusion that Bates' testimony is completely overthrown, and with it the alleged Dellhi fair fence, by the testimony of Dubois. In any event the contradiction between Bates and Dubois is of such a character as to discredit the testimony of both, and if their testimony is disposed of there is nothing to show who constructed the fence or where the barbed wire came from, and without that the fair fence falls, and if that falls the other Morley cases go with them, as Bates is the chief witness to all.

Potter, another of the appellees' chief witnesses, who lives in Delaware County, Iowa, and knows the Hoags (record, p. 1222), testifies that before the war, and "as nearly as I can recollect, it was 1859 or 1860" he attended a fair at Delhi, on the Stone farm, and while there saw a wire fence. "There were some posts in the ground. I think there were two posts, and then I think there was a small tree at one end where the wire was hitched. I think there were about three or four wires on it. I think there was barbs on the top wire. Do you want to know what the barbs were, what kind? I don't know what you mean exactly." "There was barbs on the top wire." The panel of fence which he saw "might have been a dozen feet long, and might have been fifteen." The barbs were wound around, "I think, about twice. They were made out of wire—common wire. The top wire was barbed, I think, the whole length," and was exhibited by Alvin Morley.

Although this witness pretends to describe the fence, even to the construction of the barbs, he has no recollection of the board, from three to four inches wide, which was suspended from the top wire, and which must have been the most noticeable thing in connection with the fence. The remarkable part of his testimony is in connection with his production of what he testifies is a specimen of the fair fence. A reading of his testimony upon this point leads to the positive conviction that it is false. The manner of his producing the specimen, as if it was something that had accidentally cropped out during his examination, and wholly unbeknown to appellees' counsel as well as to the appellees, condemns it. He was asked (45 Q.): "You can "state whether or not you have got any specimen of the barb "wire you saw on the fair grounds at Delhi; and if so, state "where it is?" As if he would have gone from his farm to the place of examination without taking with him the specimen of wire in reference to which he was to be examined. Yet his answer is, "I have got a piece of it at home, I think. I did "have the last time I was there—that Alvin Morley gave to "me on the fair grounds. I asked him if he was willing to "break me off a piece to take home, and he said he was, and "broke me off a piece."

46th Int. Where have you kept that wire all these years?

Ans. Well, I took it home, hung it up in a sort of a summer kitchen, a sort of a board thing; thun I got to talking with my wife one day what she thought such a kind of a fence would make for cattle. She thought it would not be safe; that it would tear cattle too bad, so I concluded I would take it and

put it in a trunk that I had that I kept old keepsakes in—old relics like. I put it in there and locked it up, and it has been there ever since.

47th Int. About how long has it been in that old trunk?

Ans. It hae been there ever since, except what little time it hung up there in that summer kitchen.

48th Int. How long did it hang up in the summer kitchen?

Ans. Oh, I could not say positive.

49th Inth. About how long?

Ans Oh, it might have been a year or a little longer.

50th Int. What do you keep in that relic box, and how long have you had the box, and how did you come by it?

Ans. My mother gave it to me; it is trunk that my oldest brother made; I have had it a good many years, probably fifty years; I keep a good many notions in it—some pretty old ones.

51st Int. Describe some of your relics there kept?

Ans. I have got a bocket-book in there that my jather gave me and that his father gavə. I have got a knife in there that my father gave—knife and inkstanp combined. It was handed down from I don't knw har back. I have got a testa- in there that my father gave me when I was a little boy. I have got a pair of spectacles in there that I believe were my grandfather's.

51st Int. Well, I don't care to have you describe everything, but state whether the relics kept in there are many or few?

Ans. I have got a very nice specimen of stone that I found on my land. Oh, I have got a good many; I have not named probably half of them.

52nd Int. Will you go home and get that specimen of barbed wire which Mr. Morley gave you on the fair ground at Delhi and produce the same, to be annexed by the notary as an exhibit to your deposition, before we finish your examination?

Ans. Yes; I suppose I can if I can have it back; *I don't want to part with it.*

53rd Int. You can state whether or not since the adjournment for dinner you have been home and got a specimen of the wire you have been testifying about before dinner; and, if so, produce it.

Ans. I have. (The witness now produces a piece of wire, which is handed the notary.)

54th Int. Now, state whether or not this wire which you now produce is the identical piece of wire that was given to you by Alvin Morley on the fair ground at Delhi before the war of 1861.

Ans. It is the identical wire.

55th Int. You can state again where he got it from when he handed it to you.

Ans. He broke it off from the fence that was on the fair ground, Certainly a most ramarkable story, and one beyond belief.

In the first place, why should he have wanted a piece of that fence? It was not to duplicate it, for he never manufactured it; it was not to use it, for he never made any use whatever of even the small specimen which he claims he took. No witnesses are produced who saw Morley give him the specimen. No witnessess are produced who ever saw the specimen from the day Morley gave it to him to the day he produced it on his examination. His story is that he took it home, hung it up in the summer kitchen, and finally locked it up in a trunk, wherein he kept old keepsakes, where it thereafter remained. Can you conceive of the possibility of a man treasuring a specimen of barb wire, of no earthly value to him, in any such manner? It is certainly the last article in the world that a man would put into a trunk with keepsakes. He gives no reason whatever for treasuring up that specimen of barb wire, much less for locking it up in his trunk with other keepsakes; and there was no reason for his doing so. It was a specimen of wire, made by one with whom he had no connection other than as an acquaintance, and which he saw only in passing at the fair. He does not even know where or by whom it was made, or what became of the fence after the fair.

Now comes the most remarkable thing in connection with his production of this alleged specimen of wire. He was asked to go home and get the specimen and produce it, and his answer was, "I suppose I can, if I can have it back. I don't want to part with it." Why should he not have wanted to part with it? Of what value was it to him? He never had used it, and there was no ties between himself and the maker of it. His own testimony as to that specimen stamps it as a lie. It is beyond all credence.

The interest of this witness in these cases is shown by the fact brought out on his cross-examination, that he was almost constantly in attendance during the taking of the evidence, and that he boarded at the same house with Thompson, one of the appellees. He testified on cross-examination when asked what day he attended the fair, "I could not say. I do not think they held the fair in those days more than a couple of days. I could not say for certain."

"246 X Int. When did you first encounter Mr. Morley with his fence?

Ans. It was there on the fair ground.

247 X Int. Which day was it?

Ans. I could not say, but probably saw him both days.

248 X Int. Did you see the fence the first day?

Ans. I think I did."

Bates and other witnesses testify that the fence was not put up until the second day, which was the last day of the fair. The witness says his attention was called to the fence "because there were other people there looking at it," and that "they had a bull on the ground, and a boy riding it, and someone proposed to have the bull rode over the prickers and see how he would stand that; and that was one thing that called my attention." Another remarkable and most absurd story. A story that I do not believe this Court would believe if it was sworn to by the scores. What object could they have had in wanting to ride a bull over that fence, and who would have attempted such a thing?

He is not certain if Morley was at the fence when he first saw it. He might have been, and he might not; although he does not swear positively that he ever saw the fence but once. That he did not I think is evident from the following testimony:

"258 X Int. And you frequently saw Mr. Morley at the fence did you not?

Ans. I presume I saw him there a number of times.

259 X Int. You had a conversation with Mr. Morley at this fence, did you not?

Ans. I presume I did talk with him.

260 X Int. Don't you know whether you did or not?

Ans. I do know. I did have a conversation with him.

261 X Int. Was it at this fence?

Ans. Yes, sir.

262 X Int. Was there a good many people around at the time looking at the fence?

Ans. I don't think there was the last time I was talking with him. I can't say positive, though."

In short he can remember nothing as to his visits to the fence and talks with Mr. Morley, yet he produces a specimen of the wire. On cross-examination, and after at least two adjournments, he remembers that there was some kind of a strip or board on the fence. As to the specimen of wire he produces, he says that Morley broke it off from the top wire, and that as produced by him it is in the same condition as received from Morley. Now, if the Court will look at the ends of the specimens produced, it will be convinced that the wire could not

have been broken off in any such way as the witness afterwards testifies to and be in its present condition. He says it was broken off from "this corner post where the spike was driven in."

287 X Int. He left the remainder of it hanging loose, did he?

Ans. I could not say whether he did or whether he fixed it up somehow. I was fixing to go home.

288 X Int. How did he break it off?

Ans. He took it off the spike that was driven in the posts and broke it off with his hands.

289 X Int. Did he break it by twisting it back and forth with his hands?

Ans. Yes; he broke it right with his hands—at least I did not see him have anything else.

290 X Int. He just bent it back and forth with his hands until it broke, did he?

Ans. I suppose he did.

291 X Int. What did you do with this exhibit after he broke it off and gave it to you?

Ans. I carried it home with me.

292 X Int For what purpose did he break this off and give it to you?

Ans. I don't know of any other only that I asked him if he would give me a piece.

293 X Int. Was there anybody present when you asked him and he gave it to you?

Ans. There might have been, but I could not say positively.

294 X Int. Why did you request him to break this off for you?

Ans. I thought at that time that I might want to build some of that kind of fence.

Notwithstanding his last answer, it is a fact that he never even attempted to build any fence of that kind, nor did he bring it to the attention of anyone else; nor did he remember it until he recalled it for the purpose of this case. Isn't it remarkable that he can remember all about this specimen, and yet has no recollection as to whom, if any one, was present when Morley gave it to him? And finally, the witness attempts to state what Morley said to him was his purpose in exhibiting his fence at the fair, "he said he thought he should get a patent for it," although it is not shown that he made any attempt in that direction, whereas he did obtain a patent on his traveling cow-pen, on which no barb wire was shown, yet witnesses were found who testified that wire of that character was upon it. That he should have gone to the fair,

exhibited his fence, and told this witness Potter that he thought he should get it patented, and yet make no effort in that direction, certainly creates a strong inference as to the unreliability of the witness's testimony, which impression is strengthened by the established fact that he did apply subsequently for a patent for his cow-pen.

In reply to the witness Potter, his son was called and examined as a witness for the appellants (record 451), and he not only contradicted his father as to the specimen of wire which he says was kept in the trunk, but says that it could not have been there without his knowing it. He testifies that he is thirty-four years of age, and as he was examined in February, 1887, he was born about 1853; that he lived with his father down to August 30, 1872, when he went to Nebraska, and remained until 1886, with the exception of four years, 1876, 1878, 1880 and 1881, when he returned and lived with his father. He knows what barb wire is. He said his father had an old trunk he used for keeping relics in, and among the things in it were "an old button-hook, an old razor, ink-stand, pen-sharpener, old pair of specs, old pocket book, few peculiar stones." That his father kept his razor there, and that he (the witness) used it about once a week, on which occasions he went to the trunk for it. That on occasions other than when he went for the razor he examined and inspected the contents of the trunk, and that the trunk was about a foot and a half long by ten inches wide, and about one foot high, and that no barb wire, so far as he knows, was ever kept in that box. His testimony upon that point is most positive, although it was in direct contradiction to the testimony given by his own father.

"26 Q. Please look at the piece of barb fence wire now shown you, marked "Delhi Fair Wire Exhibit," and state whether or not, during any of the years you have lived with your father, there was ever in that old trunk this piece of barb wire now shown you, or any other piece of barb wire.

A. No, sir."

27 Q. Prior to the time you left your father's farm in 1872 was there any pieces of barb wire or barb wire of any description around your father's house or farm?

A. No, sir.

Not only does the son's testimony completely overthrow the testimony of the father as to the keeping in the trunk of that specimen of barb wire that was produced, but taken in connection with the testimony given by Potter, Sr., himself, places his story beyond belief. If that specimen of barb wire was in that box, a box "about a foot and a half long, about ten inches

wide, about one foot high," the son must have seen it in going there, both for the razor and when he examined and inspected its contents, as he says he did, and yet he testifies positively that it was not there.

The only other testimony I consider it necessary to notice, in view of the very full digest and accompanying argument that will be submitted herewith, is that of George Underwood (Record, page 1061), and it is only for the purpose of calling the attention of the Court to the fact that his testimony is the recollection of what took place when he was a mere boy eight or nine years old. A reading of the testimony will surely satisfy the Court that he is not entitled to belief; that it is utterly impossible that he should have any such recollection of what transpired when he was eight or nine years old. Furthermore, that what he testifies to with reference to his being hurt upon the fence is impossible, as will be demonstrated to the Court during the oral argument. The testimony of this witness contradicts that of almost every other witness in the case; as, for instance, he says, when speaking of seeing the fence at the fair: "I saw it during the three days I was there, three or four days;" when it is an admitted fact that the fair only lasted two days. In short, this witness' deposition is a fair sample of the unreliable character of every one of the appellee's witnesses who testified not only to the alleged Delhi fair fence, but the other alleged Morley farm fence.

Should the Court, after the reading of the appellees' testimony as to the alleged Delhi Fair and Morley Farm Fences have any doubt as to the non-existence of those alleged fences, that doubt will be entirely dispelled by a reading of the testimony offered by the appellants, taken to show the non-existence of those alleged fences.

Submitted herewith is a complete digest of all the testimony taken *pro* and *con* as to all the alleged prior fences, accompanied with argument which most conclusively shows not only that there is grave doubt as to the existence of each and every one of the alleged prior fences, but that in point of fact they did not and could not have existed under the circumstances testified to.

As to the alleged Long fence, it is abundantly certain that it did not exist until subsequent to the date of Glidden's invention of the patent in suit.

As to the alleged Stone fence, that was before *Mr. Justice Brewer* in the case against the *Grinnel Wire Company*, and in rejecting it he said:

"The remaining fence is what is called the 'Chester D. Stone Fence,' and this is the one which has left in my mind the most doubt. The facts are these: Chester D. Stone, from 1870 onward, lived a few miles from the village of Delhi, in this State, and within half a mile on the line of the Chicago, Milwaukee & St. Paul Railroad. His brother-in-law, a man by the name of Bidwell, in 1870 and 1871, rented a piece of land about three quarters of a mile from Stone's residence. Around that tract was a smooth wire fence. Mr. Bidwell went away and left the tract in charge of Mr. Stone. Prior to its inclosure with this wire fence, it seems a traveled way had run across the north-east corner. After its inclosure this fence at the north-east corner was frequently broken down, and Mr. Stone testifies that in 1871, he barbed the wire in this way. Taking a number of staples, and with the assistance of a son of Mr. Bidwell, a boy of six or seven years of age, coiled these staples in the form of a barb around the fence wire. The instruments which he had were a hammer and a wedge. He first pounded the staples firmly onto the wire, then separated the two extremities of the staple by means of the wedge, and by use of the hammer upon the wedge coiling these two ends of the staple around the fence wire. Prior to putting on these staples, some of the posts on that corner being rotten, he subtituted some new ones. The fence wire, instead of being fastened by staples to the posts, was run through holes bored in them. His brother giving up this tract, Mr. Stone desiring to use a portion of the fence for the purpose of building a fence from the railroad track eastward, and so as to inclose a pasture adjoining the track and opposite his own residence, in 1873, took some 20 rods of this fence, with the posts, away from this northeast corner up to this pasture and made the cross-fence. A portion of the wire from this cross-fence was produced as an exhibit, and, with the staples coiled around the wire, presented substantially the same structure as the Glidden fence. His testimony was positive as to the identity of the exhibit with this cross fence, and as a part of the fence made in 1871 and removed in 1873 from the Bidwell tract This, of course, presents a very strong showing of prior invention.

In support of his testimony, the defendant introduced the testimony of sundry witnesses to the effect that in 1871 and 1872 they saw certain barbs on the Bidwell fence, and also to the fact that this cross-fence was placed adjacent to the railroad track in 1873. Furtber, Mr. Stone, having testified to

placing some of these coiled staples on other parts of the fence around the Bidwell tract, a woman, occupying the tract south thereof, testified that in 1871 she was in the habit of taking her child, crawling under the wires of this fence, going up a little rise and sitting there with her child; that she noticed these barbs upon the fence; also the testimony of a witness that, riding home one night with his brother-in-law, a portion of this wire fence got entangled with the wheels of their conveyance and was carried home, and on examination, the next morning, they discovered these barbs. As against these two last items of testimony was the testimony of the brother-in law, squarely contradicting, explaing how a portion of the wire was carried home, and stating that there were no barbs on it; also of the lessor of the tract occupied by the woman above named, tending to show that the lease under which she was occupying terminated very early in 1871, and rendering it very improbable that prior thereto, in that season, she could ever have gone into the Bidwell tract in the manner or for the purpose she stated. Further, the complainant introduced the testimony of witnesses familiar with the Bidwell tract, who denied the presence of any barbs, of the presence of the barbs, of the parties who leased and occupied it the year after Mr. Bidwell gave it up, and who testified that the fence at this northeast corner was still complete, and that no part had been removed; of the section boss on the railroad, who testified that this cross-fence was not placed there until after 1876; of other witnesses working or residing on adjacent tracts, who gave similar testimony.

I cannot state in detail all the various items of testimony of this kind, for there is a great volume of it, coming from many witnesses, and on both sides.

Two or three matters, I may state, have led me to doubt seriously the truthfulness of Mr. Stone's statement:

First, the great difficulty of coiling staples around the fence wire in the manner and with the instruments that he had. I have tried, and had tried, this matter experimentally before me. While it may be done, yet the process is exceedingly slow and difficult—so slow and difficult that I think no man would pursue it except under the most imperative need. Again, Mr. Stone's explanation of the reason for doing it is, to say the least, an improbable one. He says that he did it in order to make the people living on the adjacent tract believe that he thought cattle broke the fence down. I do not think it probable that any man would take such pains to impress his neighbors with any conviction as to his own beliefs.

There was also another matter in his testimony which, for

the moment, has escaped my recollection, but which, as I studied it, led me seriously to doubt his veracity. Of course, striking his testimony out as not entitled to credence, the defendants' case must fail in this respect; and, while I am reluctant to impugn the veracity of any witness, I must confess that his own testimony carried discredit to my mind. The complainant presented what was testified to be an accurate model of the cross-fence in its present condition, and their counsel argued that it carried on its face a perfect demonstration of the falsity of Mr. Stone's testimony. I could not see the force of this alleged demonstration, and yet, for the reason above named, I felt, after studying the matter, that Mr. Stone's testimony was not entitled to belief."

A reading of the evidence in these cases will show that the testimony taken to establish the existence of that fence is substantially the same as was before and commented upon by Mr. *Jutsice Brewer*. Furthermore, a careful reading of the evidence will show that the existence of that fence is not established. It is fully treated of in the digest of and argument upon the evidence.

The alleged Manchester Fair fence is unworthy of serious consideration.

The alleged Beer's fence was before *Judges Drummond and Blodgett* in the case of the *appellant* against *Haish* (supra), and was by them rejected. In disposing of that alleged fence, as well as the other alleged fences set up in that case they said:

"A large mass of testimony has been put into the cases bearing upon the question of novelty, and the state of the art at the time these inventions are claimed to have been made. The defendants have introduced voluminous proofs tending to show the public use of barbed wire for fencing purposes long prior to any of these alleged inventions. We will not take the time to examine those proofs in detail, but dispose of that branch of the case by saying that these proofs fail to satisfy us that barbed wire for fencing purposes had ever been publicly known or used prior to these inventions in such manner as to defeat these inventions for want of novelty. We do not intend to be understood as intimating that the witnesses who have testified to the various instances of the use of barbed wire for fencing purposes have been guilty of intentional false swearing, but simply to say that this proof, which is almost wholly made up of the recollections of witnesses revived after the lapse of many years, and contradicted, as it is in most instances, by the explicit testimony of other equally credible witnesses, leaves so much doubt as to the actual existence of

these various barbed wire fences, or any of them, as to make it at least unsafe ground on which to defeat a patent. The rule as to the degree of proof required to defeat a patent by showing prior use is well stated in the following authorities: "

In the Haish case the alleged maker of the fences was examined, as he is not in this cases. A reading of the testimony leaves no doubt that the fence had no existence.

In leaving these alleged prior fences, as I do in great confidence that upon a careful reading of the testimony they will be found as to each and every one of them not sustained, I call the attention of the Court to the language of his *Honor Judge Coxe* in the case of *Thayer* v. *Hart*, 20 Fed. Rep., 693, which has direct application to these cases:

"The rule in such cases is very strict. It is so easy to fabricate or color evidence of prior invention, and so difficult to contradict it, that proof has been required which does not admit of reasonable doubt.. Where interests so vital are at stake, where intervening years have made perfect accuracy well nigh impossible, where an event, not deemed important at the time, has crowded from the memory and obscured by the ever varying incidents of active life, it is not difficult to imagine that even an honest man may be lead erroneously to persuade himself that the fact accords with his inclination concerning it."

IX.

Conceding the establishment of the existence of any or all of the alleged prior fences, they do not in any way affect the patentable novelty of Glidden's invention nor the validity of the claim of his patent, as they were all abandoned experiments.

It is not pretended that any of the alleged prior fences were ever manufactured and used other than by the parties themselves, and to the very limited extent heretofore stated. Their use was in every case purely experimental, in the strictest sense of the term, much more so than in many cases wherein this Court has held that the claimed use was simply an abandoned experiment.

There is no pretence that any of these alleged wires were manufactured and sold or manufactured for sale, or that their

use was in any sense public except in the cases of the Delhi and Manchester Fair Fences.

The rule of law as to what constitutes an abandonment of experiment is so well settled as not to require extended discussion.

In the Corn Planter case, 23 Wallace, 209, the rule was stated and applied by this Court, and the use of one machine in planting five acres of corn was held to be an abandoned experiment. Said this Court, speaking through *Mr. Justice Bradley*:

"But the machine was never used again and was afterwards broken up, and no other was ever made. Remy made many other corn planting machines on a different principle, but he said there was no demand in that region for a machine of this kind."

The *Corn Planter* case presented a very much stronger case of use than is presented in any of the alleged uses in these cases. Yet it was held to be an abandoned experiment. If such a use is an abandoned experiment all the present alleged uses undoubtedly are.

In not one of them was there any use, equivalent to the use of a complete machine, in the planting of five acres of corn.

The rule is also stated and applied by this Court in *Seymour v. Osborn*, 12 Wall., 516, and *Smith v. Goodyear*, 93 U. S., 486; and in *Gaylor v. Wilder*, 10 How., 477.

The facts in the last named case presented a much stronger case of use than it is claimed for in any of the uses in these cases, and if the rule was there correctly stated and applied—as I submit it was—then, if similarly stated and applied to the alleged uses in these cases, the finding must be that they were all abandoned experiments.

A very instructive case upon the question of abandoned experiments is that of *Putnam v. Holland*, 19 Blatch., 48. In that case Mr. *Justice Blatchford* held the alleged use to be an abandoned experiment.

"The invention was for a very small matter in itself—a bottle stopper. There was not the slightest doubt that the thing was made and put upon a bottle in the beer saloon kept by the alleged prior inventor, and was to some extent actually used for a number of months The witnesses said it "worked good," but no more were ever made. The evidence of half a dozen who swore positively that they saw it and described it month after month in actual use was characterized by the Court as wholly defective and insufficient, because the claimant was a mechanic provided with tools, and if

the contrivance has practically worked as well as was alleged, the Court was of opinion that he would certainly have made some more and used them.

Said the Court: "How nearly Otto approximated to the end in view, he only made progress. The world derived no benefit from what he did. The recollection of it was stimulated by the success of DeQuillfeldt's invention. But for that Otto's structure would have still been reposing in the old trunk beneath the stairs, forgotten and worthless."

There would seem to be no doubt upon the facts here presented, in view of the well settled rule of law, that the alleged uses, even if shown to have existed, are each and every one of them to be classed as abandoned experiments.

X.

The claim of the Glidden patent in suit is not lacking in patentable novelty, even though it be shown that Glidden is not the inventor of the wire barb. Though each of the elements composing Glidden's concrete structure was old, it nevertheless involved invention to select those old elements and bring them together into a new association for the production of a new concrete structure—a structure which is not only new in its entirety, but at once distinguishable from every structure that preceded it, both in its character, adaptability, value and utility.

The invention was in the new assembling of old elements for the production of a new result, and that new result, which is the thing patented, is an entirety, consisting of a combination of old elements, incapable of division or separate use. It is that entirety, and not the separate elements composing it, that is to be considered in determining the question of patentable novelty. Is the thing as an entirety new? That is the prime question.

Upon this point *Mr. Justice Brewer* said:

"It is true, when when we take this structure to pieces aud examine its separate elements, as counsel have in their arguments, it has been, to my mind at least, very difficult to say that any element was not found, substantially, or nearly so, in some one or other or these prior barbed wires. Still, looking at it as a whole, it is unquestionably new, and, I think, must be held to be the product of invention rather than of mere mechanical skill."

That there is invention—patentable novelty—in the combination or assemblages of old elements for the production of a new result, is now well settled.

Said this Court in *Seymour v. Osborn*, 11 Wall., p. 548 :

"Such a change in an old machine may consist merely of a new and useful combination of the several parts of which the old machine is composed, or it may consist of a material alteration or modification of one or more of the several devices which entered into its construction, and whether it be the one or the other, if the change of construction and operation actually adapts the machine to a new and valuable use, not known before, and it actually produces a new and useful result, then a patent may be granted for the same, and it will be held as a patentable improvement."

A doctrine which has since been repeatedly affirmed and applied by this Court, until it has now become one of the well settled rules of law.

In applying the rule in *Bates v. Coe*, 98 U. S., p. 40, wherein the patentability of an invention for a combination of old elements was sustained, this Court said : "None of the elements "or devices of the patented machine are new and the invention "consists in a combination of old devices. Such a combina- "tion is an entirety, though more than one combination may "be included in the same patent."

Equally well settled is the rule that a patent for a combination of old elements is not defeated, nor is the invention lacking in patentable novelty, by showing that the elements composing the combination were old, or that they had, in part, been before associated together.

As was said in *Bates v Coe* (*supra*) : "Where there is only "one combination of an entire new character, incapable of di- "vision or separate use, the defences of the kind mentioned "must be addressed to the invention."

That is, that the defences must go to the article as a whole, and not to the separate elements composing it ; that the mere existence of the separate elements, or the association of some or all of those elements, is not sufficient to defeat a patent for a combination unless it be shown that they had been before associated or combined in substantially the same manner and for the production of substantially the same result ; of which there is no pretence in this case, except it be the one small specimen of Beers fence.

Upon this point it was said also in *Bates v. Coe* (*supra*): "Where the thing patented is an entirety, consisting of a sin- "gle device or combination of old elements, incapable of divis-

" ion or separate use, the respondent cannot escape the charge " of infringement by alleging or proving that a part of the en- " tire thing is found in one prior patent or printed publication, " or machine, and another part in another prior exhibit, and " still another part in a third one, and from the three or any " greater number of such exhibits draw the conclusion that the " patentee is not the original and first inventor of the patented " improvement."

Judged by that rule, unless the Court should conclude that the existence of the one specimen of the Beers' fence is established, and that is not to be regarded as an abandoned experiment, the Glidden patent is neither anticipated nor is it void for insufficiency of invention by anything produced by the appellees.

It is not claimed, apart from the Beers' specimen, that Glidden's combination was old, nor that it is shown in any of the prior patents or structures produced by the appellees ; but the contention is that it is found part in the Kelly patent and part in the alleged Delaware County fences, and that the bringing of those different parts together involved no invention. Precisely the defence urged in the case of *Bates v. Coe*, and which the Court then said was not sufficient to defeat an invention for a combination of old elements.

Again, in *Imhauser* v. *Buerk*, 101 U. S., 660, wherein the patentability of an invention for a combination of old parts was sustained, this Court restates and applies the rule as follows :

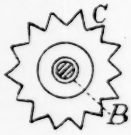
" Before entering upon a separate examination of these several patents it is proper to remark that it is not pretended that any one of them embodies the entire invention secured to the complainant in his letters patent. Nothing of the kind is pretended, but it is insisted that each contains some feature, device or partial mode of operation corresponding in that particular to the corresponding feature, device or partial mode of operation exhibited in the complainant's patent.

" Suppose that is so; still it is clear that such a concession cannot benefit the respondent, it being conceded that neither of the exhibits given in the evidence embodies the complainant's invention or the substance of the apparatus described and claimed in his specification. Where the thing patented is an entirety, consisting of a single device or combination of old elements incapable of division or separate use, the respondent cannot escape the charge of infringement by alleging or proving that a part of the entire invention is found in one prior patent, printed publication or machine, and another part in

another prior exhibit, and still another part in a third exhibit, and from the three or any greater number of such exhibits draw the conclusion that the patentee is not the original and first inventor of the patented improvement."

Confessedly the Hunt patent does not show the Glidden combination, nor a single element of that combination, other than a plain strand of wire. Instead of making his barb of wire, which material he had before him, he made it of sheet metal :

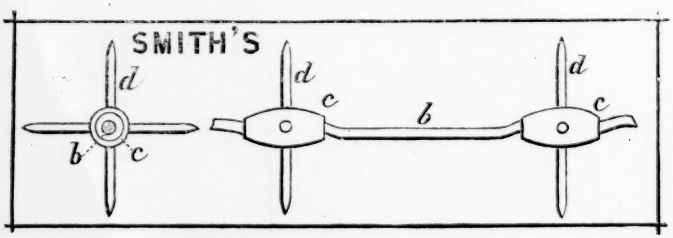
HUNT'S SPUR WHEEL



to do which he had to make special dies to cut his barb out of sheet metal.

If the making of a barb of wire and applying it to a strand of fence wire were such an obvious thing why did it not occur to Hunt? He had before him the problem of making a fence wire that would deter animals "from pushing against the fence or attempt to break over it;" and he realized the importance of keeping the barbs in place and at suitable distance apart, as he says he accomplishes that "by means of flanges or otherwise;" yet it never occurred to him to make his barb of wire, the doing of which would have solved the problem as well as overcome his difficulty of keeping the barb in place. The doing of which would also have, not only facilitated the making of his barb but materially have lessened the cost of his wire, as no argument is needed to show that the making of the barb of wire would have cost very much less than making it of sheet metal as Hunt did. All that was necessary to make his wire—which confessedly was a failure—a success, was to have made his barbs of wire using for that purpose the very wire which he had before him, yet it did not occur to him to do so. The use of two plain strands of wire twisted together for fence purposes was old at the date of Hunt's invention, yet in the light of that, it did not occur to him to apply a barb of any kind, much less a wire barb, to one strand of the wire and hold it in position and place by the twisting of the two together; and this too, when, if the contention of the appellees be true, the making of a barb of wire was old and well known. If there was no invention in

what Glidden did, it is difficult to understand why it did not suggest itself to Hunt or to someone else immediately following him, the desirability and demand for such fence wire and the reward that was sure to follow its production being obvious. Although Hunt's patent is subsequent in date to Smith's it was established in an interference between them that Hunt was the prior inventor. Nor does the Smith patent show Glidden's combination or a single element of that combination, other than a plain wire strand, as in the Hunt. The problem which Smith had before him was the same as Hunt; they were both working to the same end for the production of "a wire "fence especially adapted to use in the prairies of the Western "States where timber is scarce and that would turn animals readily." Smith, like Hunt, had plain wire before him. It was the basis of his fence, yet it did not occur to him any more than it did to Hunt, to take a short piece of that wire, a waste end so to speak, and make his barb out of it by twisting it between its end around the fence wire. If that was so obvious, if it was simply the work of a mechanic requiring no exercise of invention why did it not suggest itself to Smith. Instead of making his barb of wire and applying it to a single strand or to one strand of a twisted cable, he made a spool or hub and inserted into it. four short pieces of wire or nails so as to have them project readily,



Instead of approaching the Glidden combination Smith worked in an opposite direction. He did that which beyond all question would never suggest to any one Glidden's invention. True, he used wire in the making of his barb, but how? Not by taking a short piece of wire and coiling it between its ends, but in taking very short pieces or nails and driving them through or inserting them into a spool first made for the purpose. True, he realized the necessity of preventing the barbs from sliding lengthwise on the barb, but how, not by the use of a second wire, but by bends in the wire forming a shoulder on each

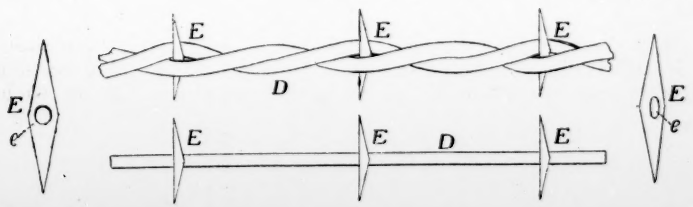
side of the barb. How easily it would have been for both Hunt and Smith – how simple they now say it is—to have taken and formed their barbs out of the wire which they then had before them; instead of doing what they did, and to have prevented their barbs from moving lengthwise on the wire, as well as from rotating—for both the Hunt and Smith barbs rotated on the wire—by the use of a second wire, the use of two wires twisted together for fencing purposes being old, and yet they did not do it nor anything approaching it in the remotest degree. Nothing could be more conclusive of the question of invention on the part of Glidden in the production of his combination, than what is shown in the patents to Hunt and Smith.

The year following the Hunt and the Smith patents, Kelly obtained his patent, having made his invention in the light of the structures shown therein.

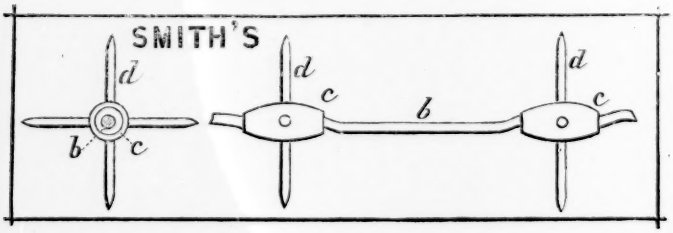
The Kelly patent of February 11th, 1868, neither shows nor describes the Glidden combination nor does it show the elements of that combination, other than the two wires twisted together forming a cable which was quite old. Although Kelly had before him the conceded failures of Hunt and Smith, and like them the wire out of which he could have made his barb, had it only occurred to him to do so, yet he followed in the footsteps of Hunt and made his barb out of sheet metal. In doing so he entirely ignored Smith, who had used short pieces of wire or nails as elements in the making of his barb, as he used no wire in any manner or form whatever in the making of barbs.

Kelly made his barb entirely out of sheet metal, pierced it in the middle and strung it on the wire precisely as did Hunt. Now, if the making of the barb entirely out of wire, and the clamping it in position and place on one wire, by the use of a second wire, was so obvious, why did it not suggest itself to Kelly, especially when he had the failures of Hunt and Smith before him. In view of what Kelly did, it is impossible to believe that the production of Glidden's combination did not require invention. Kelly used the single strand of wire on which he strung and placed his barbs made of sheet metal, and to which he secured them by compression upon the side of the barb.

KELLY



what Glidden did, it is difficult to understand why it did not suggest itself to Hunt or to someone else immediately following him, the desirability and demand for such fence wire and the reward that was sure to follow its production being obvious. Although Hunt's patent is subsequent in date to Smith's it was established in an interference between them that Hunt was the prior inventor. Nor does the Smith patent show Glidden's combination or a single element of that combination, other than a plain wire strand, as in the Hunt. The problem which Smith had before him was the same as Hunt; they were both working to the same end for the production of "a wire "fence especially adapted to use in the prairies of the Western "States where timber is scarce and that would turn animals readily." Smith, like Hunt, had plain wire before him. It was the basis of his fence, yet it did not occur to him any more than it did to Hunt, to take a short piece of that wire, a waste end so to speak, and make his barb out of it by twisting it between its end around the fence wire. If that was so obvious, if it was simply the work of a mechanic requiring no exercise of invention why did it not suggest itself to Smith. Instead of making his barb of wire and applying it to a single strand or to one strand of a twisted cable, he made a spool or hub and inserted into it four short pieces of wire or nails so as to have them project readily.



Instead of approaching the Glidden combination Smith worked in an opposite direction. He did that which beyond all question would never suggest to any one Glidden's invention. True, he used wire in the making of his barb, but how? Not by taking a short piece of wire and coiling it between its ends, but in taking very short pieces or nails and driving them through or inserting them into a spool first made for the purpose. True, he realized the necessity of preventing the barbs from sliding lengthwise on the barb, but how, not by the use of a second wire, but by bends in the wire forming a shoulder on each

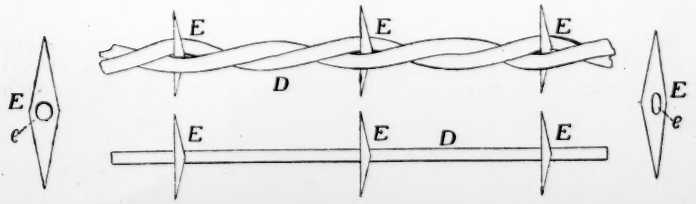
side of the barb. How easily it would have been for both Hunt and Smith - how simple they now say it is—to have taken and formed their barbs out of the wire which they then had before them; instead of doing what they did, and to have prevented their barbs from moving lengthwise on the wire, as well as from rotating—for both the Hunt and Smith barbs rotated on the wire—by the use of a second wire, the use of two wires twisted together for fencing purposes being old, and yet they did not do it nor anything approaching it in the remotest degree. Nothing could be more conclusive of the question of invention on the part of Glidden in the production of his combination, than what is shown in the patents to Hunt and Smith.

The year following the Hunt and the Smith patents, Kelly obtained his patent, having made his invention in the light of the structures shown therein.

The Kelly patent of February 11th, 1868, neither shows nor describes the Glidden combination nor does it show the elements of that combination, other than the two wires twisted together forming a cable which was quite old. Although Kelly had before him the conceded failures of Hunt and Smith, and like them the wire out of which he could have made his barb, had it only occurred to him to do so, yet he followed in the footsteps of Hunt and made his barb out of sheet metal. In doing so he entirely ignored Smith, who had used short pieces of wire or nails as elements in the making of his barb, as he used no wire in any manner or form whatever in the making of barbs.

Kelly made his barb entirely out of sheet metal, pierced it in the middle and strung it on the wire precisely as did Hunt. Now, if the making of the barb entirely out of wire, and the clamping it in position and place on one wire, by the use of a second wire, was so obvious, why did it not suggest itself to Kelly, especially when he had the failures of Hunt and Smith before him. In view of what Kelly did, it is impossible to believe that the production of Glidden's combination did not require invention. Kelly used the single strand of wire on which he strung and placed his barbs made of sheet metal, and to which he secured them by compression upon the side of the barb.

KELLY



He says in his patent that the barbs "are small pieces of iron or steel" and are "cut out from a plate by machinery," and "are each provided with a hole *e* corresponding to the size of the wire, but a little larger, so that they may be introduced easily upon the wire." "These pieces (barbs) after being strung on the wire at a distance of about six inches apart are compressed laterally upon the wire by a blow of the hammer or otherwise so as to flatten the hole *e* and also correspondingly flatten the wire at the point where this adjunct is to stand."

So, instead of taking the wire, which he had before him, and making his barb, which they now say was so obvious as not to require invention, he cut his barbs out of sheel steet or iron, requiring special machinery for the purpose, and afterwards stringing them on the wire, instead of using a second wire for holding in position and place, he does it by compressing the barbs laterally by a blow of the hammer. The above cut shows the drawings before and after the compression, and the lower cut of the single wire shows the barbs secured in place by compression. What could be more conclusive of the fact that Kelly did not know that his barbs could be held in position and place by the use of a second wire intertwisted with the wire carrying the barbs than the manner in which he sets forth in his patent they are to be secured? The necessity of securing his barbs in place he fully appreciated, yet it never occurred to him to do it by the very means at his command, to wit: a second wire, and which he did suggest could be used, if desired to strengthen the wire: that is, the fence. He says, "I can, "where it is desirable to increase the strength of the wire, lay "another wire of the same or a different size alongside of a "thorn wire and can twist the two together by any suitable "mechanism."

Then, according to Kelly, the use of the second wire was simply to increase the strength and not for holding his barbs in position and place. It is not to be denied that the twisting of the two wires had the effect of limiting the movement of the barbs in both directions in case they became loose, but that was due simply to the fact that the twisting of the wires blocked, so to speak, the space within which the barbs could move. That is a very different thing indeed from clamping the barbs in position and place by the twisting of the wires. One—the Kelly—confines the movement of the barbs within a certain space, but does not prevent them from moving within that space. While the other—the Glidden—clamps the barbs

in position and place so as to absolutely prevent their moving even within the space blocked off by the twisting of the wires. The latter is an element of the Glidden combination—although it is not an element upon which, in any sense, the novelty or patentability of the combination depends—while the former is not.

Said *Judge Treat* in the case of the appellants against Fuchs, 16 Fed. Rep., p. 665 :

" In the original Kelly patent, the specifications of which are above quoted, there is nothing to indicate the use of a second wire, twisted, for locking purposes. The means of keeping the plate or barb in position was entirely distinct from the strengthening of the fence wire by twisting around it a second wire. * * * * Indeed, if the barb plate was rigidly attached to the fence wire, which was the main object of the original invention, the second wire could accomplish no other purpose, as stated, than to strengthen the first wire, for the barb plate was already, by the contrivance named, rigidly fixed."

But apart from every other question, the facts remain that Glidden's combination is neither shown nor suggested in the Kelly patent ; and that it never occurred to Kelly—with all that he had before him—to make his barb of a short piece of wire, twisted between its ends around one wire and to clamp it in position and place by use of a second wire, intertwisting them together. That is Glidden's combination, and it is a combination as an entirety, that is totally separate and distinct, and distinguishable from the Kelly structure.

That Kelly's structure of two wire strands and a sheet metal barb has some likeness in general appearance to Glidden's compound structure, and more nearly resembles it than either the Hunt or the Smith, is of little moment in determining the question of patentable novelty in the production of Glidden's combination. It is undeniable that Glidden's combination is not found in either of the prior patents to Hunt, Smith or Kelly ; nor are the elements composing that combination found in any of those prior patents or in all of them combined. None of them show the application of a wire barb to one strand of a wire, and the holding it thereon in position and place by means of a second strand ; and if correct in my view of the Kelly patent, there is not shown in any of those patents the use of a second wire for clasping a barb of any construction in position and place on one wire by the use of a second wire.

In considering a somewhat similar question this Court, in the case of the *Consolidated Valve Co. v. Crosby*

Valve Co., 113 U. S., p. 171, said, speaking through *Mr. Justice Blatchford*:

"Likenesses in them, in physical structure, to the apparatus of Richardson, in important particulars, may be pointed out, but it is only as the anatomy of a corpse resembles that of the living being. The prior structures never effected the kind or result attained by Richardson's apparatus, because they lacked the thing which gave success. They did not have the retarding stricture which gave the lifting opportunity to the huddled steam, combined with the quick falling of the valve after relief had come. Taught by Richardson, and by the use of his apparatus, it is not difficult for skilled mechanics to take the prior structures, and so arrange and use them as to produce more or less of the beneficial results first made known by Richardson; but, prior to 1866, though these old patents and their descriptions were accessible, no valve was made producing any such results." In this case, as in that case, with all the old patents before them and knowledge of what had been done before accessible, no one produced the Glidden composite structure, nor a structure, in a legal sense, having any resemblance to it or adapted to the same uses.

What this Court said in the Valve Company case as to the Richardson invention, is equally true of Glidden's invention, and its application being fully justified by the facts, should be conclusive in this case, as it was in the Valve Company case, upon the question of patentable novelty.

"Richardson's invention brought to success what prior inventors had essayed and partly accomplished. He used some things which had been used before, but he added just that which was necessary to make the whole a practically valuable and economical apparatus. The fact that the known valves were not used, and the speedy and extensive adoption of Richardson's valve, are facts in harmony with the evidence that his valve contains just what the prior valves lack, and go to support the conclusion at which we have arrived on the question of novelty."

Beyond all question Glidden's invention brought to success what prior inventors had essayed and partly accomplished. He used some things that had been used before, but it added just that which was necessary to make the whole, thereby producing a new article that undeniably did not exist in any sense before.

But it is said that Glidden was not the inventor of the wire barb and that all he did was to substitute the wire barb for the Kelly sheet metal barb. What of it? That does not nega-

tive patentable novelty. Furthermore, it appears that the substitution—if that is all he did—produced a new article which is clearly patentable, and Glidden's invention is for that article, not for the wire barb. The barb is simply one element of his combination, which combination did not exist before. Assuming then that all Glidden did was to substitute the wire barb for the Kelly barb, did not that substitution involve invention? Most certainly it did, for by that substitution he produced, as I have before stated, an entirely new result. If not, why did not Kelly, Hunt or Smith make the substitution and produce the new article? Why did it not occur to the army of skilled mechanics if it was such an obvious thing? Why did it not occur to the army of inventors who, it is said, were working to the same end? Why was it left to Glidden to make the substitution and produce that new result more than five years after the date of the Kelly patent, and which, when produced, went at once into universal use? It was because it was not an obvious substitution; because it was not a substitution of the character that would suggest itself to the skilled mechanic, and because it was a substitution that did require the exercise of invention. It called for the exercise of the inventive faculty as distinguished from those substitutions which are self-evident and readily suggest themselves to the mechanic skill in his art. The one character of substitution is the work of a mechanic; the other that of an inventor, and Glidden's substitution, if such it be called, was of the latter class.

The rule upon that point is nowhere better stated than by this Court in the case of *Loom Company v. Higgins*, 105 U. S., where said *Mr. Justice Bradley*, speaking through the court:

"But it is plain from the evidence, and from the very fact "that it was not sooner adopted and used, that it did not, for "years, occur in this light to even the most skillful persons. It "may have been under their very eyes, they may almost be said "to have stumbled over it; but they certainly failed to see it, "to estimate its value, and to bring it into notice Who was "the first to see it, to understand its value, to give it shape and "form, to bring it into notice and urge its adoption, is a ques-"tion to which we shall shortly give our attention. At this "point we are contrained to say that we cannot yield our "assent to the argument that the combination of the different "parts or elements for attaining the object in view was so ob-"vious as to merit no title to invention. Now that it has "succeeded, it may seem very plain to any one that he could "have done it as well. This is often the case with inventions "of the greatest merit."

It is not to be denied that for at least ten years prior to the date of Glidden's invention, many minds were working to the same end. Evidence of this is found in the patents to Hunt, Smith and Kelley. Yet to none, save Glidden, did it occur to make what is now termed the mere substitution of one old and well known form of barb for another—which they say was self-evident to every mechanic—although that substitution brought forth a new result, and with it its just reward to the inventor, as the record in these cases abundantly shows. That there was invention in such a substitution, with such a result, is abundantly established in the reported cases. Among others in the case of *Wilcox* v. *Bookwalter*, 31 Fed Rep., 224, wherein His Honor *Judge Sage* said:

"But when, for years, skill is unsuccessfully reaching out in "all directions for a desired result, and finally some one, by a "new device or new process, which no one else had thought of, "accomplishes it, that fact is strongly indicative of invention, "and it may be conclusive; for skill had long sought it in "vain, and, therefore, the law may recognize it as a discovery, "or as the embodiment, novel and useful, of a mental concep-"tion; that is, as an invention.

* * * * * *

"It was a greater improvement than had been made by any "of his predecessors. If it was not invention, why had it not "been wrought out by the skill of some one, at least, of the "thousands of workmen in hubs and wheels throughout the "United States, constantly doing their best to make improve-"ments in the very line of his improvement? The conclusion "of the Court is that it was invention, and that his patent is "valid."

XI.

Glidden's invention of the wire barb and concrete wire structure has been the subject of almost endless litigation, and still the decision in these cases had been uniformaly upheld.

In the first case that of the *appellants against Haish*, 4th Fed. Rep., 900, both the Glidden reissue No. 6,913 of February 8th, 1876—being reissue of patent No. 156,083 of May 12th, 1874—and the patent in suit were involved, as well as the Kelly Reissue No. 6,902 of February 8th, 1876, owned by

the appellants—being a reissue of the Kelly patent of February 11th, 1868, No. 74,379—the claim of which was the combination substantially as described with two wires DD twisted together and a series of thorns E strung upon one of said wires and held in position by them as and for the purposes set forth. The Court sustained both the Kelly and the Glidden reissues.

The patent in suit was held invalid, the Court treating it as a subsequent patent based upon a subsequent invention to that of the Glidden patent of May 12, 1874, and therefore in law to be judged in the light thereof.

The question of the date of Glidden's respective inventions, and therefore which of his patents was in legal effect the prior patent, does not appear to have been presented to, or considered by, the Court. This is placed beyond doubt by the language of the Court :

"The Glidden patent of May 12, 1874, showed a device for keeping the wires of a fence stretched, or spread apart, by means of a slotted tube. It also shows, as part of the mechanism, a barb made by coiling a short piece of wire between its ends around the fence wire. This feature was not claimed in the original patent, but is claimed in the reissue as part of the invention, and, as it is shown in the original specifications and drawings, the patent may be considered as having been properly re-issued to cover this device. The second Glidden patent, of November 24, 1874, is for a "twisted fence wire, having the transverse spur wire D, bent at its middle portion about one of the wire strands of said fence wire, and clamped in its position and place by the other wire strand twisted upon its fellow substantially as specified." The proof shows that the final form of fence wire and spur which has been adopted for practical use, is substantially that shown in the last Glidden patent ; but it seems to us there was nothing left in the line of invention to justify the issue of this patent to Glidden as an inventor. The idea of barbing fence wire was Hunt's. The idea of fixing the barb rigidly upon the wire, and holding it in place by another wire twisted upon it, was Kelly's. The wire barb looped over the wire, or one of the wires, was that of Glidden's EARLIER patent ; and by grouping all these devices into one finished wire a result is obtained substantially like that shown in the final Glidden patent of November, 1874. There was nothing new in Glidden's last patent, and no room for the claim of invention in the wire therein provided."

The Court then regarded the Glidden patent of May 12, 1874—upon which the re-issue was obtained—as the earlier patent in legal effect and under it sustained Glidden's

invention of the barb wire. Considering them in that order, and in view of the fact that Kelly's patent had been re-issued with a claim for the use of a second wire for holding the barbs in position, which was sustained, there was presented a very different question indeed from what would have been, and is here, presented. In that light the Court, having sustained Glidden's invention of the wire barb and Kelly's re-issue for the use of the second wire for holding the barbs in place, concluded that there was no invention in what was set forth in Glidden's second patent. It is self-evident that had the Court had brought to its attention the fact that the patent of November 24th, 1874, was in legal effect the prior patent—being based upon a prior invention, and so treated it—its conclusion would have been just the contrary, and that it would have sustained the claim of the November patent and judge the reissue of the May patent in the light thereof. The effect of sustaining Glidden's invention of the wire barb was to give him a complete monopoly, not only of the wire barb, but of the compound structure of his November patent, for the wire barb was a necessary element of that structure and without it could not be made.

In the next case, that of the *Appellees against Fuchs*, 16 Fed. Rep. 663, in the Eastern District of Missouri, wherein the Glidden invention was in controversy, the Court, in view of the more recent rulings of this court on the doctrines of reissues, held both the Kelly and Glidden reissues invalid.

The Kelly, because it had been reissued with a claim for the use of a second wire for holding the barbs in position and place—a feature which was not contained in the original patent.

The Glidden, because it had been reissued for a claim for the wire barb which was no part of the original patent upon which it was founded—that patent being for the slotted tube coil spring device, and which was an element of the compound wire structure of Glidden's earlier invention.

The effect of Judge Treat's opinion, concurred in by Judges McCready and Love, was to sustain Glidden's invention of the compound wire structure of the claim of the patent in suit, as will be apparent from a careful reading of the opinion.

The next case in which Glidden's invention was involved, was that of the *appellees* against the *Grinnell Wire Company*, in the 24th Fed. Rep., p. 23, wherein *Mr. Justice Brewer* sustained Glidden's invention of the compound structure of the claim of the patent in suit. In that case every question that is here presented was then presented, considered and determined with the exception of the alleged

prior Long, Manchester Fair and Beers Fence—the latter of which was involved in and overthrown in the case of the appellees against Haish. And as to all those fences even *Judge Shiras* admits that they are not sustained if the alleged Morley Delhi Fair Fence is not sustained, as the proofs as to the existence of the latter is far more convincing than to the former. But, as already pointed out, the proofs do not, in view of the well-settled rule of law, sustain the existence of the alleged Morley Delhi Fair fence, and it will be found, as a matter of fact, that the same is equally true as to each and every of the other alleged prior fences.

XII.

The appellees have infringed the claim of the patent in suit. The wire manufactured and sold by them is the Glidden compound wire structure in its entirety. They have attempted no evasion, but have taken it without change or modification; taken it in preference to all other structures, including the Hunt, Smith and Kelly, all of which were open to them to manufacture, since the appellees did not commence the manufacture and sale until after June, 1885. True, the appellees put their barbs alternately on the different fence wires, but in every case the barb is applied to one wire only and held in position and place by the other, by the intertwisting of the wires. The identity of the appellees' wire with the wire of the claim of the patents in suit is established by comparison. As said the late *Mr. Justice Grier* in *Adams* v. *Jones*, 1 Fisher, p. 531:

"We have had ocular demonstration by an examination of the defendants' admitted manufactures that they palpably infringe the invention patented to complainant. When we have the thing before our eyes (*oculis subjecta fidelibus*), we want no opinion of mechanics or experts, and give no further reason for our opinion than that we have seen, and surely ought to know."

It is submitted that the decrees of the Circuit Court should be reversed and these cases remanded with direction to enter decrees as prayed for in the Bill of Complaint.

JOHN R. BENNETT,
Counsel for Appellants.

NOTE.—These cases were prepared under the personal supervision and direction of the late Mr. Benjamin F. Thurston, with whom was associated Mr. C. K. Offield, and the cases were argued by them in the Circuit Court. Fortunately, Mr. Thurston's argument was reported and printed, and I submit herewith a reprint of his argument on behalf of the appellants.

I also submit, on behalf of the appellants, an exhaustive digest of the evidence, as to the alleged prior fences, accompanied with argument, prepared by Mr. Offield, and submitted by him to the Circuit Court.

Their familiarity with these cases make it eminently proper that their arguments and digest should be submitted to this Court on the presentation of these appeals, since they traverse every point raised by the issues in the cases.

[redacted]

It is submitted that the decrees of the Circuit Court should be reversed and the causes remanded with direction to enter decrees as prayed for in the Bill of Complaint.

JOHN R. BENNETT,
Counsel for Appellants.

143 U.S. 275

Office Supreme Court U. S.
FILED.
DEC 15 1891
JAMES H. McKENNEY,
CLERK.

IN THE SUPREME COURT OF THE UNITED STATES.

OCTOBER TERM, 1891.

No. 128.

WASHBURN & MOEN M'F'G CO. and ISAAC L. ELLWOOD,

Appellants,

vs.

BEAT 'EM ALL BARBED WIRE CO., et als.,

Appellees.

No. 129.

SAME,

Appellants,

vs.

W. W. NORWOOD,

Appellee.

No. 130.

SAME,

vs.

JOHN D. WILER, et al,

Appellees.

BRIEF AND ARGUMENT ON ALLEGED PRIOR FENCES,

BY MR. C. K. OFFIELD.

JOHN R. BENNETT,

Counsel for Appellants.

INDEX.

	PAGE.
Old Morley's Delhi Fair Fence. Defendants' witnesses	3 to 35
Complainants' Testimony in Rebuttal of Defendants' Delhi Fair Fence	35 to 45
Old Morley's Travelling Cow Pen. Defendants' witnesses	45 to 49
Complainants' Testimony in Rebuttal of Old Morley's Traveling Cow Pen	49 to 56
Old Morley's North Farm East Line Fence and South Line Road Fence. Defendants' witnesses	56 to 63
Complainants' Testimony in Rebuttal of Old Morley's North Farm East Line Fence and South Line Road Fence	63 to 66
Old Morley's South Farm Road Fence. Defendants' witnesses	66 to 69
Complainants' Testimony in Rebuttal of Old Morley's South Farm Road Fence	69 to 72
Morley Wire at Mill. Defendants' witnesses	73 to 77
Complainants Witnesses in Rebuttal of Morley Wire at Mill	77 to 79
Authorities cited to show unreliability of memory alone to establish existence of alleged prior structures after long lapse of time—and Rule of Proof	79 to 85
W. H. Long Fence. Defendants' witnesses	85 to 95
Complainants' Witnesses in Rebuttal of Long Fence	95 to 103
Chester D. Stone Fence. Defendants' witnesses	104 to 119
Complainants' Testimony in Rebuttal of Chester D. Stone Fence	119 to 124
Manchester Fair Fence. Defendants' witnesses	124 to 128
Complainants' Rebuttal of Manchester Fair Fence	128 to 130
Hutchinson Fence. Defendants' witnesses	130 to 136
Complainants' Witnesses in Rebuttal of Hutchinson Fence	136 to 140
Beers Fence. Defendants' witnesses	140 to 145
Complainants' Testimony in Rebuttal of Beers Fence	145 to 150
No Hardship for Defendants to cease the Manufacture of Complainants' Wire	150, 151

IN THE

CIRCUIT COURT OF THE UNITED STATES,

NORTHERN DISTRICT OF IOWA,

Eastern Division.

WASHBURN AND MOEN MANUFACTURING COMPANY and ISAAC L. ELLWOOD vs. THE BEAT 'EM ALL BARBED WIRE COMPANY, ET AL.	In Equity.

ALLEGED PRIOR USE FENCES.

Brief and Argument for Complainants, by C. K. Offield.

MAY IT PLEASE THE COURT :

In the division of labor in the presentation of the issues involved in the above entitled cause, there has been allotted to the undersigned the presentation of the questions of fact growing out of the testimony in this case, in which it is attempted to be asserted in behalf of the defendants, to the end and effect that, long anterior to the date of application of the Glidden patent in suit, barb fence-wire was publicly known and used by several individuals at various points at and within a few miles of the City of Manchester, Iowa, where the above individual

defendants reside, and at one point in a State adjoining the jurisdiction of your Honor.

We desire to premise our discussion of the subject, by making the court a party to our understanding to the effect that, even admitting each and every allegation of prior existing fences to be true, with the possible exception of one division of the "Beers fence" in said adjoining State, under the most roseate description and identification of structure which can be given them by the defendants themselves from this record, we confidently assert that in none of such alleged prior use structures can be found to reside the invention of the Glidden patent in suit. But believing, as we do, that none of the allegations of prior use are true, some of them, as a matter of fact, and some of them as to form and date of construction, as alleged in the defendant's record, we shall earnestly contend that none of such prior alleged fences ought to be recognized or considered by the court as an element in any manner, either in anticipating or limiting the Glidden invention in question.

The questions that are presented for the consideration of the court in this case are not new. The assaults made upon the Glidden patent in the court, by means of assertions of prior invention, are not new. Several of the identical instances of alleged prior use urged and elaborated in this record by the defendants, have been before the Federal courts, and there sifted, and found either to be fraudulent as an entirety, or worthless as to having any effect upon the Glidden patent.

The alleged prior use fences, when marshaled and collated from the defendant's record, appear to be ten in number, five of which, however, are alleged to have their origin and exclusive use by one individual, and appear in this record under the general designation of "Old Morley's Fences," the other five being alleged to be distinct and separate fences by different individuals at different places. The entire list of such fences I deem more convenient to present to your Honor, in the following order:

1. Old Morley's Delhi Fair Fence.
2. Old Morley's Traveling Cow Pen.
3. Old Morley's North Farm East Line and South Line Road Fence.

4. Old Morley's South Farm Road Fence.
5. Old Morley's Wire at Mill.
6. W. H. Long Fence.
7. Chester D. Stone Fence.
8. Manchester Fair Fence.
9. Hutchinson Fence.
10. E. A. Beers Fence.

The various barb wire fences are alleged to have been made and used by old Mr. Morley at a point within a few miles of the City of Manchester, and are alleged to have been so made and used between the years 1857 and 1866.

Who was Old Man Morley?

Old Mr. Morley, as appears by this record, was a harmless lunatic, with a brain fermented beyond any degree of usefulness, and who, for more than a decade of years, lived on the prairies and in the woods near Manchester, a part of the time able to attend to the few simple duties necessary for sustainment of life, a part of the time under the supervision and custody of a lunacy commission, and who, twenty years ago, died in a madhouse near his home in Pennsylvania, after a year's immurement.

The above facts are clearly established by this record in many places, and it is to this party, the defendants have seen fit to accredit the invention and use of barb fence-wire between the dates specified.

Old Morley's Delhi Fair Fence.

This was the same fence that was presented and urged by the defendants in the recent case of these *Complainants* v. *The Grinnell Wire Company* (24 Fed. Rep., Vol. 24, 25), which was heard and decided by his Honor, Judge Brewer, and in which case this Delhi fair fence was weighed in the balance and found wanting, as appears from the following quotation from that decision:

"The Delhi county fair fence discloses this state of facts: "That about 1858 or 1859, some twenty-five years ago, at a

" county fair held at the county seat, there was exhibited a " fence which, according to the recollection of some of the " witnesses, consisted of three strands of wire, on which were " fastened barbs like those on the Glidden, and also a board " below the wire for the purpose of attracting the attention " of the cattle. While several witnesses testify to their recol- " lection of such a fence, and the similarity of the barbs there- " on to the Glidden style of barb, other witnesses, including " therein the officers of the fair association during those years, " have no recollection of anything of the kind. That, of " course, is to some extent negative testimony ; yet of value. " Then there is a line of testimony to show that there " was a model of a fence, essentially different from any- " thing in controversy here, circulated in that vicinity " and exhibited at that fair. But take the testimony of " the defendants alone in reference to the fence. Can " you rely on the recollection of witnesses reaching back over " twenty-five years, as to a particular form in which a fence " seen but for a day or two was constructed ? It would be " strange if that recollection was so clear and distinct as to " the manner in which those wires were barbed or protected " by prickers, that the court would be justified in relying very " much thereon. The infirmities of human memory are such " that it does not seem to me that, even if there was no con- " tradictory testimony, their testimony alone would enable the " Court to say that it was clear that away back in 1858 or " 1859, somebody—who he was is not disclosed, and whence " he came, or whither he went, nobody knows— presented " there a model of a fence with the combination contained in " the Glidden patent. I do not have any trouble with that " question."

The defendants, however, have seen fit to have again resurrected this fence, professing to have discovered that old Mr. Morley was the originator of it, and ostensibly produce the man who constructed said fence upon the Delhi fair ground. (The italicizing hereafter appearing in this presentation is my own). This man introduces himself in this case in his answer to Q. 1 Rec., p. 1321), under the name and style of *H. L.*

Bates, residing at Manchester, and having "*no occupation now*," but is a blacksmith. He knows the two Hoag defendants and Thompson. The mental caliber, standing and high patriotism of this witness are disclosed by the fact that *he thinks* that the war of the rebellion began in 1860. He was "pretty scared about being drafted ; *don't know when it closed.*" (Q. 6, p. 1321, C. Q. 223–4, p. 1343.) Mr. H. L. Bates, after reciting that he knew old Mr. Morley and attended the Delhi fairs before the year 1861, proceeds to state that before the year 1861 he saw and helped construct *a panel* of barbed wire fence at one of the fairs held at Delhi, as follows :

"Yes, sir ; there was a panel of wire fence there, that be-
"longed to Alvan Morley. It was put on a tree at one end
"and a post at the other, and a stake in the middle. * * *
"There was three wires. The top one was barbed about. I
"should think the barbs was about eight to ten inches apart.
"As near as I can recollect, a few barbs were on the second
"wire. There was a piece of board about three to four inches
"wide fastened by a piece of wire. I wouldn't be positive of
"the width. There was a piece of wire wound around the
"end of the board, and then wound around the end of the
"wire. There were three wires that held the board on. *
"* * I done it myself ;—helped him. I did not pull it
"all up, but I helped him. * * * It was put up the
"second day of the fair. Morley made the barbs and cut
"them off with a cold chisel, I should think. I should think
"they were either filed or ground a little. They were *slanted*
"*a very little.*" (Q.s 11 to 18.)

This witness then goes on to state that the wire was heated with a wood fire in order to anneal it and enable it to twist around the wire, and that the barbs were put on by tools which he made himself, such tools being pieces of iron five or six inches long "*with a shoulder cut in one end of them, and a* "*hole through the other.*" (Q.'s 19, 23, 24.) Made a shear in 1858 or '59 for cutting his barbs. (Q. 27.) "Made wire for "Morley, or, rather, helped make, cut his barbs for four or "five years. Don't remember of making any but once, and "that was a piece about—O, it might have been thirty feet

"long—to put on his patent cow-pen. Made it all myself." (Q's 34–5.) "Don't think any one else coiled on his barbs, "but him and me." (Q. 58) "This panel of wire fence on the "fair ground as near as I can recollect, was sixteen to eighteen "feet;—*was not over that.*" (Q. 62.)

H. L. Bates would not testify positively whether he put up the barb wire at the fair 1858, 1859, 1860 or 1861; doesn't know which year. (C. Q. 196.)

The above statement, so far as the effort of Mr. Bates in the behalf of the defendants can make it certain, would seem to be positive to the effect that the alleged old Morley Delhi fair fence was only a panel not over eighteen feet long, formed by a post at one end and a tree at the other, with a stake in the middle, three wires high, with the top wire barbed, a few on the middle wire and a board hanging down from the top wire, *and that he built it.* It is, of course, very desirable to know who actually built the alleged barbed wire fence, and how it was built, so as to properly determine the value of the testimony of complainants' witnesses in relation thereto. We are embarrassed, however, in our search after accurate knowledge in this direction by another witness called in behalf of defendants to establish the construction and existence of this same Morley Delhi fair fence, namely,

Mr. John Du Bois, (Rec. p. 1498)

who has lived in Delaware county for thirty-five years, and is a farmer, and who knows the defendants Hoag and Thompson.

Our confidence, however, in the purity of motive and entire accuracy of testimony of Mr. Du Bois, is shaken by the fact that he has been *prosecuted and convicted of a criminal offence* in Delaware county. (C. Q. 14.) Mr. Du Bois lived in Delhi in 1859 and 1860, attended the fair those years, and during one of them saw a barb-wire fence. (Q's 1 to 14.) There is however, what may be described as a polarity of difference between the statement of the confessed criminal Du Bois and the man with no occupation, Bates, as to the construction and building

of this barbed wire fence at the Delhi fair, as evidenced by the following questions and answers :

"Q. 15. Did you see any one with the wire on the ground "that was exhibiting it and apparently calling the attention "of the people to it, and if so, who was it ?

"A. *Why, I saw Mr. Morley, a man we used to call* "'*Crazy Morley.*' *I saw him there with it. He brought it* "*to my house the night before. Stayed at my house the night he* "*came down*," Mr. Du Bois further stating that "He came "there that night. It must have been 8 o'clock in the evening, "or as late as that ; and he took and rolled it up, tied a string "around it, I think, and he wanted to know if he could leave "them until morning. Then he says, 'I guess I will stay "'with you,' and I let him stay there." (C. Q. 1.) The barbed wire that stayed at his house over night looked like the same barbed wire that he saw the next day at the fair. (C. Q. 2.) Can't state whether all the barbed wire that Crazy Morley had at his house that night was on the fair ground next day. (C. Q. 5.)

We respectfully submit that after the defendants have put two such witnesses upon the stand to prove the origin and existence of barbed fence-wire at a certain time and place, that it would be impossible by any testimony afterwards produced to inspire any confidence in the reliability or truthfulness of any testimony thereafter given relating thereto. The testimony of these two witnesses was followed then by a deposition of most extraordinary character, given by one

Mr. Stephen Potter (Rec., p. 1222).

This witness appears in this record as a farmer sixty-two years old, who has lived in Delaware county since 1851. It is always interesting to know the feeling and bias of a witness toward the parties in the suit in which he is testifying. Mr. Potter, in reply to interrogatory 5, whether he knew either of the parties to the suit, stated that he *had seen* Mr. Hoag and Mr. Thompson and Mr. Hoag's son. The purity of intention

of this witness, as to his fairness and veracity, is illustrated by the fact that at that time he had been in almost constant attendance for some time upon the taking of the testimony in behalf of the defendants, and had not been absent a whole day since the taking of the depositions commenced (C. Q. 2), and that this witness Potter and the active defendant, Thompson, both before and after the giving of the Potter deposition, stopped together at the same place (Thompson's deposition (Rec., p. 944) C. Q. 56), and roomed together and slept together (C. Qs. 68 and 69). This Mr. Potter testifies that he attended one fair just before the war at Delhi, and testifies that he there saw "Some posts set in the ground; "think there were three posts. Then "I think there was a small tree at one end, where the wire was "hitched. I think there was about three or four wires on it. "*I think there was barbs on the top wire.* * * * Might "have been a dozen feet long, and might have been fifteen. "* * * Barbs were wound round it, I think about twice "around. They were made out of common wire." (Qs. 18–"22.) "Alvan Morley exhibited the wire." (Q. 27.)

And now comes a most extraordinary part of this narrative, which we will give in the identical language of defendants' counsel and witness:

"Q. 45. You can state whether or not you have got any "specimens of the barbed wire that you saw on the fair grounds "at Delhi, and if so, state where it is?

"A. I have got a piece of it at home, I think—I did have "the last time I was there—that Alvan Morley gave to me "on the fair ground. I asked him if he was willing to break "me off a piece to take home, and he said he was, and broke "me off a piece.

"Q. 46. Where have you kept that wire all these years?

"A. Well, I took it home, hung it up in a sort of summer "kitchen—a sort of a board thing; then I got to talking with "my wife one day, what she thought such a kind of fence "would make for cattle. She thought it would not be safe; "that it would tear cattle too bad; so I concluded that I "would take it and put it in a trunk that I had, that I kept old

" keepsakes in, old relics like ; I put it in there and locked it " up, and it has been there ever since.

" Q. 47. About how long has it been in that old trunk ?

" A. It has been there ever since, except what little time it " hung up there in that summer kitchen.

" Q. 48. How long did it hang up in the summer kitchen ?

" A. I could not say positive.

" Q. 49. About how long ?

" A. Oh, it might have been a year or a little longer.

" Q. 50. What do you keep in that relic-box and how long " have you had the box, and how did you come by it ?

" A. My mother gave it to me It is a trunk that my " oldest brother made. I have had it a good many years, prob- " ably fifty years. I keep a good many notions in it, some " pretty old ones.

" Q. 51. Describe some of your relics there kept.

" A. I have got a pocket-book in there that my father gave " me, and that his father gave him. I have got a knife in " there that my father gave me ; knife and inkstand combined. " It was handed down from I don't know how far back. I " have got a testament in there that my father gave me when " I was a little boy. I have got a pair of spectacles in there " that I believe were my grandfather's.

" Q. 52. Well, I don't care to have you describe every- " thing, but state whether the relics kept therein were many " or few.

" A. I have got a very nice specimen of stone that I found " on my land. Oh, I have got a good many ; I have not de- " scribed probably half of them.

" Q. 53. Will you go home and get that specimen of barbed " wire which Mr. Morley gave you on the fair-ground at " Delhi, and produce the same to be annexed by the notary " here as an exhibit to your deposition before we finish your " examination ?

" A. Yes, I suppose I can, if I can have it back. I don't " want to part with it.

" Q. 54. You can state whether or not since the adjourn- " ment for dinner you have been home and got a specimen of

"the wire you have been testifying about, and, if so, produce "it.

"A. I have. (The witness now produces a piece of wire, "which is handed to the notary.)

"Q 55. Now state whether or not this wire which you "now produce is the identical piece of wire that was given to "you by Alvan Morley on the fair-ground at Delhi, before "the war of 1861.

"A. It is the identical wire.

"Q. 56. You can state again where he got it from when he "handed it to you.

"A. He broke it off from that fence that was on the fair "ground."

We hazard the assertion, with great confidence, that this piece of wire introduced in evidence, and the narrative as to its obtainment thirty years ago, and retainment is bald and bare of any truthfulness or any element of credence and be-belief. It can not be supposed that any man would preserve and treasure through a series of years, in a trunk sacred to the relics of the past and the dead, a thing as useless, inconvenient, repulsive and devoid of interest as the piece of wire marked "Delhi Fair Wire Exhibit," and, aside from the fact that will be hereafter presented, that his son, who lived with him all those years, and was entirely familiar with this relic-box, testified that no such device was there, we simply do not believe it. While there is nothing appearing in this record to establish the proof of the following suggestion, the experience of a series of years, common to every patent counsel in meeting attempts to defeat patent property by just such tricks and performances as the above, leads us to the following conclusion as to the prior history and mode of production of this "Delhi Fair Wire Exhibit." We believe that this exhibit is of the age of a few years. We believe that this particular and identical exhibit has been buried in the product of the stable for some time to give it its present appearance, and that it has been afterwards rubbed and greased to remove all traces of its immurement in such composite. We have, of course, been able to only cursorily handle and examine this exhibit while in the

presence of the defendants and their counsel, but we suggest that if the court will examine or have examined carefully this "Delhi Fair Wire Exhibit," the court will be convinced that the same has been oiled or greased, and if such exhibit is heated but moderately, the odor will be perceptible enough therefrom to convince your Honor of the truth of its above suggested experience.

A considerable number of witnesses were examined by the defendants, who profess to recollect some kind of a fence with barbs on it at the Delhi fair before the war. The above, however, are the principal witnesses, and we will pass in brief review the others, prefacing our remarks by stating that it is evident that such witnesses have no clear or definite recollection sufficient to establish confidence in the existence of any device which they attempt to recollect or describe.

Defendants called

Mr. Patrick McMeel (Rec. p. 804).

sixty-one years old, lived in Delaware county thirty-one years, testified in the former case, and is acquainted with the defendants (Qs. 1 to 4), the witness stating: "The first barb wire I "ever saw in Delaware county was in Delhi, in either 1858 or "1859, at the county fair- I think it was in 1859. * * * "All that I remember that I saw there was a panel of fence. "I can't tell how long it was, and it may be two. I remember "there was a barb wire on the top. I cannot tell now what "kind of a barb it was or how it was put on. I guess that's "all I know about it. I don't know who exhibited it." (Qs. 4, 5 and 6.)

Upon cross-examination, this witness was not positive but that in the former case he testified that the panel of fence at the Delhi fair was of the same size as a little model shown him. (C. Q. 16–17.) Doesn't know how the barbs were fastened on the wire. (C. Q. 19.) Don't know of what material the barbs were. (C. Q. 28.) And don't think it was exhibited by anybody. (C. Q. 30.) Know there was a strip in the centre of the fence. (C. Q. 31.)

Defendants then called a witness whose statements as to his

connection with the Delhi fair barb wire fence differed in improbability, only in degree, from that of the Potter witness, namely,

Mr. George A. Underwood (Rec. p. 1061).

34 years old, and now working at coopering, lived in Delaware County principally since 6 years old; lived in Delhi in 1859, '60 and '61. (Qs. 2–4.) This witness testifies that he saw barbed wire at the Delhi fair as follows:

"I saw a piece of fence about 10 or 12 feet long on the fair-"ground, east of Andrew Stone's, on a piece of land belonging "to him. It had three wires, and the top wire had barbs on "it. I should judge the barbs were somewhere 8 or 9 inches "apart, and the barbs, I should think, were made out of this "common, smooth wire, wrapped two or three times around "and then cut off. * * * This wire fence, I should judge, "stood about 20 or 25 rods north of the direct east line, and "somewhere about 50 or 60 rods east of the road running on "the west of this lot, between the house and this lot." (Qs. 5 and 6.) "Q. 29. State about how many times you saw it "during fair time?"

"A. I could not do that. I saw it while I was around at "the fair. *I might have seen it fifty times or more. I saw it "during the three days I was there; three or four days.* I was "around playing with the boys and passed it a good many "times."

"The top wire was, I should judge, in the neighborhood of "four feet from the ground, and the south end of the wire was "fastened around a little burr oak tree. The north end there "was a small post set and the wire was wrapped around it and "twisted." (Q. 12.)

The cross examination of this witness shows that he alleges to have seen this barb wire at the Delhi fair, under the following remarkable circumstances: He was "some-"where from 8 to 9 years old," (C. Q. 109) and carries "a couple of scars which I received from the effects of it." (C. Q. 111.) "I was wrestling and playing with some

" other boys. I was thrown against the barb wire fence " and cut a gash under my right eye here (showing a " scar) and another here, about an inch below and about the " point of the cheek-bone (showing scar)." (C. Q. 113.) A stranger was exhibiting the fence. A man that came there with it. (C. Q. 118.) " He seemed to want to sell rights— " farm rights." (C. Q. 122.) * * * " I heard him " tell a man that if he would give him a certain amount of " money, he would give him the right to go and fence his " farm with it." (C. Q. 125.) This witness, when asked to describe other devices which he saw at the fair, waxed impatient after the following fashion: " I can't give the names. " A mere boy, 8 or 9 years old, I do not pay much attention " to those things." (C. Q. 139.) * * * " I " claim I can swear to that fence because I got " hurt on it, and as to the points of compass, " I know every inch of that ground as well " as you know this room in which you are sitting. * * * " It was the afternoon that I was hurt. We were standing " around in the shade of this tree, and we was on the east side " of this fence when I fell on the fence, *and they had to lead me* " *around this fence; it liked to put my eyes out, and they had* " *to lead me around this fence to the gateway, which was on the* " *west side, and take me home!*" (C. Q. 155–6.) Next appears the following interesting statement by this witness:

" C. Q. 157. If you were injured so badly that you had to " be led home, you did not stop to examine the wire after you " were hurt, did you?

" A. *I did not examine it at that time, but I did after-* " *wards.*

" C. Q. 158. *How long afterwards?*

" A. *The next week.*

" C. Q. 159. *You did not notice the fence in particular then* " *until you were hurt on it?*

" A. *No, sir.*

" C. Q. 160. And after the fair was over, and the next " week you went and examined it, did you?

" A. The next week, after the fair was over, this same boy

"that throwed me on the wire, went up into the same lot, this "fair ground, to gather some hazel nuts, and the wire fence "still stood there, and he showed me where he stood when I "got hurt, *and I examined the wire.* * * * * "Never heard of it afterwards." (C. Q. 163.)

The testimony of this eight-year old witness is another palpable exposition of the falsity of a deposition appearing upon the face of the deposition itself, the witness having first described minutely and positively this barb fence wire as he saw it the first three or four days of the fair, and then swearing, with equal positiveness of assertion, that he never noticed or examined the fence until a week after he was thrown upon it. Of course such a fence would have been left there.

The character of this witness as a falsifier will appear more clearly in considering his testimony given relating to the "W. H. Long fence."

E. Healy (Rec. p. 1088).

was the next witness called by defendants to substantiate this old Morley Delhi fair fence. Mr. Healy has *no occupation now*, and has lived in Delaware county for thirty-one years. (Q. 2.) He testified in the former case. (C. Q. 2.) Saw barbed wire at the fair ground. "It was the last year that we "had the fair there. Saw it very frequently, several times, "but did not take particular notice of it but once. I went up "and examined it closely. It was something new, and I was "somewhat interested in fences. The wire was a plain black "wire with barbs of same wire twisted around, I should judge "of the same material. About ten feet long, I should think." (Qs. 10–15) "Don't recollect who exhibited it." (C. Q. 5.)

It will be noticed that the above witness does not testify to the construction of any fence, but simply seeing a piece of barbed wire about ten feet long.

N. S. Hale (Rec. p. 1090).

resides at Manchester; is acquainted with the defendants

Thompson and Hoag, and has lived in Delaware county since 1857. (Qs. 1 and 2.) Mr. Hale gives his occupation as a groceryman. The cross-examination shows that he never even run a store of his own, but has worked as a hired man for several different grocerymen at Manchester. (C. Q. 102–109.)

This witness then proceeds to state that "when I was at the "fair at Delhi, Iowa, before the war, I saw some barbed wire "fence there. I can't say what year it was * * * I had "been to the team—the team was hitched in the road not "far from Stone's house. As I was going back to the fair "ground *I went along by the side of this fence.* It was some-"thing new to me, and I saw some wire there on posts with "some barbs on them. *I cannot state how they were put on.* "They were the first I had ever seen." (C. Q. 5–12.)

Cross-Examination.

"Was not interested in barb wire fences at that time, * * "* I went to see what was there, I suppose. *Cannot name "any article that was exhibited there nor name any person that "exhibited it.*" (C. Qs. 11, 13 and 17.) "Can not say any "one was exhibiting it." (C. Q. 29.) "One time when I went "by it I did not notice anyone there." (C. Q. 30.) "It was "standing in an open field." (C.Q.34.) "There was posts set "in the ground, wires put on horizontal and some kind of a "barb on them." (C. Q. 39.) "Barbs on near the top." (C. Q. 43.) "*There were more than three posts.*" (C. Q. 31.) "The barbs might have been soldered on." (C. Q. 63.)

Truly the recollection of this witness is hazy, indeed.

Enos Hamblin (Rec. p. 1124).

then took the stand for defendants. He has lived in Delaware county twenty-eight years, is acquainted with the Hoag defendants and Thompson, and is at present working at carpenter work. "Think I attended Delaware "county fair in 1859." (Qs. 1–4.) "I saw a wire "fence there. I could not say whether there was two or three "strands of wire in the fence. There was one smooth wire "and one wire with barbs on it, and there might have been

"two smooth wires, but can't say positively. Think the top "wire had barbs. * * * Can't tell the size. Bent around "a common sized fence wire. I could not say, but I think the "barbs were a smaller wire than the fence. * * * Can "not tell how long a strip of fence it was in feet or rods." (Qs. 6, 7, 8 and 9). "Should say two rods or over." (Q. 16).

Cross-Examination.

"Have not seen it for twenty-six or seven years. Do not "know what became of it or where it came from." (C. Qs. 4, 5, "and 6.) Do not know why this fence was exhibited at the "fair." (C. Q. 34.) "There was a strip of wood. Can not say "whether it was nailed to the posts or secured to the wire "some way. It extended lengthwise of the fence. My opinion "is it was secured fast. Won't be positive whether it had "barbs or prickers on it." (C. Q. 57–61.) The witness was then asked how the barbs were fastened to the wire, and states: "*I did not examine them closely.*" (C. Q. 63.) And replying to the interrogatory as to how long he was at the fence, he states: "I might have been there five minutes, more or less, I "can't say; passing back and forward." (C. Q. 72.)

Truly, indeed, an uncertain recollection and description.

Oscar Wellman (Rec. p. 1133).

then took the stand in behalf of this Delhi fair fence. Is acquainted with the elder Hoag, defendant, and knows the defendants Thompson and Farrell. (Q. 1–4.) First saw barb wire fence in Delaware county at Delhi fair ground. (Q. 6, 7 and 8.) "Can not say upon what "part of the fair ground, positively" (Q. 11.) "Three "strands of wire, top wire had other wires twisted round it." (Q. 12). "Can't answer positively where the points were left, "in reference to the wire." (Q. 14). "Barbs were on top "wire." (Q. 18). "Saw this barb wire prior to 1861." (Q. 22.)

Cross-Examination.

This witness is the same Oscar Wellman who testified in the former Grinnel Company case. (C. Q. 1.) The above recol-

lection of this witness appears in the cross-examination in the light of a mere opinion, and shows conclusively that the witness had no *bona fide* recollection of any fence he was trying to describe. This fact is made apparent from the following quotation from his testimony:

"C. Q. 2. Have you given a correct description of the barb " fence that you saw at the Delhi fair in your testimony to-day?

" A. As far as I went with it.

" C. Q. 3. Have you not described it fully?

" A. They have asked my opinion in the description of it. " What I thought it was, aside from this in some respects.

" C. Q. 4. Have you to day described the entire fence as " you thought it was?

" A. I think not altogether, if I remember right.

" C. Q. 5. Go on and describe the whole fence fully.

" A. Well, there was a pole hanging to the top wire that " they did not ask me about,—a pole or a piece of board. " Something, I think, hung on wires at each end of the pole. " Wires attached to the wires above was what I think it was."

" C. Q. 6. Go on and describe this fence—the whole of it?

" A. That was about all I can describe positively.

"C. R. 7. That is all you know positively about this fence, is it?

" A. I think so.

"C. Q. 8. The rest is a mere matter of opinion or thought, is it?

" A. Yes, sir; I think so."

It does not appear that this witness had anything to do with or any interest in this Delhi fair.

Joel Bailey (Rec., p. 1151),

was then called, who is seventy-two years old; resides at Manchester, and his occupation is mostly farming. Mr. Bailey was elected County Judge in the fall of 1859, and is by his position and standing by far the most reputable witness who went upon the stand for the defendants in this Delhi fair matter. But a careful analysis of Mr. Bailey's deposition shows a

hesitancy of expression and a vagueness of recollection, and an uncertainty of judgment and opinion, which impresses us with the belief that the recollection which he now has is the product of recent conversations and an anxiety to assist his fellow-townsmen in establishing the identity of something which in his mind is extremely vague and uncertain. Mr. Bailey's exact language is: "I can't tell you when I first saw a barb wire "fence—a fence made of barb wire. *The first time I ever saw "barbs on a wire was not a fence.* It was on a sample at that "fair down there. * * * There was a wire probably—oh, "I can't tell how long, it might have been twenty feet, but it "was at least ten or twelve feet long—attached to posts. I "recollect one post distinctly, and I suppose the other end was "attached to a post. *I did not examine how these barbs were "put on, or how they were made.* I think they were made of "a lesser wire and were wound around. It strikes me they "were called prickers. * * * Q. 16. Do you know, "positively, that there were barbs on the wire, and, if so, "state your reason? A. *There was something on the wires.* "I think they called them 'prickers' instead of 'barbs,' at "that time. As I said before, they were a new thing to us. "They were using plain wire, and there was a good many dis-"satisfied with it. This, having prickers on, would be more "severe and would be more liable to harm stock."

Mr. Bailey has long lived in a locality peculiarly hostile to the invention covered by the letters patent in suit, and doubly so by reason of this litigation pending between strangers to him and his life-time acquaintances, and it appears to us quite plain from his deposition, that he has strained both his imagination and recollection to rather *assent to* the existence of a desired device, than to himself declare that he has any positive or reliable recollection of such device.

Defendants then call

Aaron Sullivan (Rec., p. 1161),

who was born in 1811 and is loafing at present, but has lived in Delaware County forty-one years and is acquainted with the defendants. (Q. 1–3). "Saw wire fence at the fair at

" Delhi before the war. It was strung on posts. The top wire " had prickers or barbs upon it. There was a slight board, not " wider than your three fingers, hung under the top wire and was " attached to the top wire by small wires. * * * The " barbs were wire, pointed sharp, twisted once around ; I think " once around the wire. The barbs were a little over an inch " long, I should say. * * * Inch anyway, out from the " wire. I did not measure it. Some twelve or twenty feet. " I did not count the barbs. I think it was a little over six " inches between the barbs." (Q. 9, 10 and 11.)

Cross-Examination.

" I testified in a case against the Grinnel Wire Company." (C. Q. 1.)

In relation to this witness testifying in the other case as to whether or not the barbs were soldered on, he now states : " I " might have said I did not notice enough to tell whether they " were or not. They might have been, but I don't believe " they were." (C. Q. 19.) " Don't know where this wire " fence came from, nor where it went to." (C. Q. 35–37.)

The witness was then called upon to describe the fence exactly and precisely as he recollects it, as follows :

" C. Q. 42. You may describe it again. *Tell what this fence* " *was composed of—everything.*

" A. It was compossd of posts and a slat hung under the top " wire by more wire, and the fence was composed of wood and " wire.

" C. Q. 43. *That was the fence you saw at the fair and that* " *is a complete description of it, is it?*

" A. Yes, sir ; this fence that is in question."

It is a significant fact that in the above answers where he professes to describe the entire composition of the fence—everything—and give it as a complete description, the barbs and prickers are omitted. He refuses to give the name of the exhibitor as follows :

" I shall not name the man unless I am compelled to do so

" —what I think the name is—for I may be wrong. It has " been a good while.

" C. Q. 48. Then you refuse to give the name, do you?

" A, Yes, sir."

To follow the deposition through, there is a carefulness and minuteness of detail as to a variety of things which impresses one with the conviction that this old gentleman has recently held conversations regarding the subject matter concerning which he is interrogated, and his testimony relates more to his recollection of such conversations than it does to any actual knowledge.

David Connor (Rec., p. 1169),

was another old gentleman called by the defendants. Seventy-two years of age; knows the two Hoag defendants and Thompson, and has lived in Delaware county pretty near forty years. (Q. 1–3.) Attended the fairs at Delhi before the war The first barb wire he saw was; " Well, I saw it at Delhi at " at the fair. Not such barbs as we use nowadays at all. " They were just wires bent around smooth wire and sharpened " and stuck out; was stuck out an inch and a half or two inches." (Q. 12.) * * * " Well, sir, there was one end " of it fastened to a post and the other end was fastened either " to a post or to a tree—that I can't remember—and the top " wire was stretched and had these prickers on it, and the next " piece to it was a piece of wood—appears to me a board that " hung loose. Then there was another wire below the board. " The wire below the board was smooth—was nothing on it." (Q. 16.)

This witness, on cross-examination, shows that he does not remember the barb wire he first saw and used on his place. (C. Q. 4 and 6.) Saw the barbed wire the last day of the fair. (C. Q. 26.) Detailed cross-examination of this witness also developed a most remarkable construction of this Delhi fair fence. The wooden strip upon the fence " was fastened to the posts, but was loose." (C. Q. 69.) * * * " There were four or five strips about a foot long. They

" might have been longer or shorter. They were just strips " of boards hung there. I do not know how they were hung, " *but they were hung so that they swung in the wind.* They " hung over the wooden strip." (C. Q. 73.) * * * " There was the one that went through under the first wire, " and those three or four that hung up and down." (C. Q. 77.) * * * " Those that hung up and down " would move and hit the other. The other would, too; the " other was loose, too." (C. Q. 78.) " Don't think those " that hung up and down reached to the bottom wire." (C. Q. 79.)

The cross-examination of this witness shows that in his prior examination he testified that he only saw it one time. (C. Q. 80, 81.) It is difficult to tell from the entire deposition of this witness whether what he saw at that fair nearly thirty years ago was a fence, a horsefiddle or an Æolian harp.

J. H. Burington. (Rec., p. 1178.)

is sixty-eight years of age; lived in Manchester twenty years, and knows the defendant, Hoag. (Q's. 1–3.) Attended the fairs held at Delhi before the war. (Q. 6.) Saw at one of the fairs " some wire fence put up—I think one end of the wire " was attached to a small tree, and two other posts, to my " best recollection, were put up to hold the wire. The wire " itself was smooth wire. One of the strings was barbed by " wires being twisted around this smooth wire, and cut off " slanting. Should think there were three or four wires." (Q's. 9, 10 and 11.) " The barbs were wound around the " smooth wire two or three times. The ends stuck out and " were cut off slanting. * * * What called my " attention to it in the first place was a lot of fellows having " some fun over trying to drive a bull onto the barbed wire. " I had charge of one of the tables at the time, and I think it " was Watson Childs, to my best recollection, was at the other " one. After the fun was over, we went up to see what they " were at, and examined the wire, and had a talk over the " barb wire. What was that old fellow's name that lived

"south of Delhi? I cannot always think of his name. He "got to riding this bull around the track. It was a small "track, and he was pretty tight. As he came around near "where the barb wire was, a lot of fellows got around him "and tried to drive the bull on the wire with him on it. "That was what drew our attention." (Q's. 14 and 15.)

We suggest that it would be well for this witness to pair off with the eight year old witness, Underwood, who swung by his eye-lids from the top of this fence.

Cross-examination of this witness shows that he was there by the fence fifteen or twenty minutes talking about it; never examined it before and has never seen it since. (C. Q's. 45, 6 and 7.) That he was at the fair the first and second days or both days (C. Q. 50), and saw the fence both days. (C. Q. 51.) Did not know why this fence was exhibited at the fair, or for what purpose. (C. Q. 68.)

T. W. Robinson, (Rec., p. 1307.)

was then called by the defendants. Resides at Manchester, "and am a horse dealer, I suppose." Lived in Delaware county twenty-nine years. (Q's 1 to 4.) Attended Agricultural fairs at Delhi, Delaware county, in the fall of *1850* and *1860* on Mr. Stone's farm. (Q's 5 and 6.) Assistant marshall and had a dapple gray horse. (Q's 8 and 9.) "Well, I saw some wire "strung on some posts. I won't state postive how many. "Well, there was one wire that had some, what they call snags "on; I think was the name they went by." They are called barbs now. "They were simply a piece of wire twisted "around the main wire, twisted I think a couple of times "around, and with a kind of a blunt sharp on them." (Q 12.. * * * I hitched my horse to one of the posts for a few moments. When I went after him he had snagged his under lip, that is about all. It bled considerably. (Q. 13.) Knew a man by the name of Alvin Morley.

Cross-Examination.

"I had heard that he had a guardian over him and was "considered insane * * * and my brother and brother-in-

" law that I had with me that summer and winter used to have " a great deal of fun with him." C. Q. 12.) Regarding the interest which this witness took in this alleged fence and his ability to describe it he says: " *I could not pretend to get these* " *things exact, as I was not enough interested in it to pay par-* " *ticular attention to it.*" C. Q. 16.) * * * "*Now I will state* " *from any examination I made of that barbed wire I will not* " *state whether the barb was once, twice or a dozen times* " *arouud it. I probably would not have noticed it at all if I* " *had not got my horse hurt on it.*" (C. Q. 99.) I had enough to do not to stand there and listen to what any one exhibited or what any one had to say. (C. Q. 101.) Don't know whether he had it there for his own curiosity. He appeared to be calling people's attention to it. (C. Q. 102.) Witness don't know but that the end of the fence wire hurt his horse, but don't believe it. (C. Q. 120.) The witness, in answer to C. Q. 126–7 as to whether he described all parts of the Delhi fair fence: " *Well, sir, that is something I would not pretend to do,as it* " *was a matter I did not take interest in.*"

The recollection of the above witness seems to be uncertain indeed. All that we can feel certain about his testimony is to the effect that, at one of the Delhi fairs, either in 1859 or 1860, he owned a valuable horse which was slightly hurt about the under lip, that he remembers this incident to this day, and appears to have located twenty-five years after the cause of this slight injury to his horse, to a fence, which he did not examine, had no interest in, cannot describe, but thinks now that it was a barbed wire fence.

Col. J. H. Peters. (Rec., p. 1212.)

another witness of acknowledged position, called by the defendants, is an attorney, resides at Manchester, and is acquainted with the defendants, elder Hoag and Thompson, and has resided in Delaware county since 1853, excepting four years during the war. (Q's. 1–3.) He attended the fairs at Delhi before the war. Thinks they were held every two years, one in '58 and one in '60. (Q's. 7–9.)

Col. Peters states that at "the last fair that I attended there "was a wire fence exhibited there. To describe it. My rec- "ollection is that there was but one panel, two posts. I should "say they were set in the ground, but I am not positive; and "wires strung between the posts; I should say some three or "four, or perhaps five wires; the top wire I should say the "usual height of a fence; I should say perhaps four and a half "feet; with a slat or bar between the top and second wire, or "between the second and third wire. The slat or bar, my "recollection would be, was about two or two and a half "inches broad and perhaps was square. I can't remember as "to that, nor how it was fastened, whether nailed to the posts, "or hung from the wire, I don't recollect. The wires were "what we now call 'barbed.' The only expression I heard for "them at the time was from my friend, old man Thorpe. He "called them 'prickers.' I can not undertake to describe "minutely the manner in which these barbs were placed on the "wires. I have seen so many different devices or different "shaped barbs that my mind is confused as to just how they "were arranged. * * * *As I said before, I won't under- "take to be positive about it.* My best recollection is that they "were short wires, twisted once or twice around the main "wire, cut off diagonally, so as to leave sharp points. Am "positive there were barbs of some kind on the wire." (Q's. 11, 12 and 13.)

Colonel Peters gave the same testimony in the case against the Grinnell Wire Co. (C. Q. 1.) Colonel Peters, in cross-examination unconsciously, it appears to us, discloses the manner in which his recollection, as above given, has been created and formulated, and frankly states that "but for the refresh- "ing of my recollection by conversations and by data, I should "have entirely forgotten the entire circumstances." (C. Q. 3.) The following question and answer also throw light on the manner of creation or education of the memory to the recollection of the desired expression of fact.

"C. Q. 4. Have you not, during the past two or three "years, heard very much conversation about this Delhi fair "fence, and has there not been models or pretended models of

"the same frequently shown to you or been in places where "you saw model or models?

"A. *Oh, yes; I have heard this Delhi fair fence described a "great deal. I don't remember to have seen but one model of "that fair fence. It was exhibited at the time my former testi- "mony was taken. It was introduced by the defendants. I "have no doubt but the introduction of the model and the dis- "cussion of the subject has, to a considerable extent, tended to "confuse my memory. At the same time, the discussion of the "subject has materially refreshed my memory on many points.* "* * * There was two patent fences, or two fences, "exhibited on that fair ground. The sample of the wood "fence was left in Mr. McCormick's yard. * * * I "don't think I ever saw anything of the kind before, and I do "not know where it came from. * * * Don't know who "exhibited it and don't know what became of it."

We respectfully submit that the above recollection of Colonel Peters, as described even by himself, is unreliable and unconvincing as to the existence of any thing except, perhaps, some kind of a fence at the Delhi fair. It certainly falls far short of the required identification of the construction and operation of a mechanical device sufficient to defeat a patent grant.

Anson Sheldon (Rec., p. 1264).

was next called by the defendants. He resides at Manchester, "is not much of anything now; farming generally." He knows all the defendants. (Q. 5.) Attended the fair at Delhi before the war, one year. (Q. 11.) At that fair "I saw some wire stretched from a tree to two posts, one at the "end and one in the middle, and, as near as I recollect, there "were three wires. There was a pole or rail on top, and on "the wires there was some wires wound round—twice around, "points running out opposite to each other, or nearly so." (Q. 15.) "Understand they are now called barbs." (Q. 19.) "Don't know who exhibited that wire." (Q. 20.)

Cross-Examination.

"Saw the fence in the afternoon. Not a great while. Ex-"amined it." (C, Q's 7, 8 and 9.) "There was a pole or rail "*on top* of the fence." (C. Q. 11.) "Think there were "barbs on all the wires." (C. Q. 12.) "Do not know where "it came from, or where it went to." (C. Q's 17 and 18.) *Only saw the fence once.* (C. Q. 33.)

This fence appears to be growing. It now has a rail on top of the fence and, perhaps, barbs on all of the wires.

Newman S. Preston (Rec., p. 1278),

then appeared for defendants as to this fair fence. Is fifty years old, and a farmer, but never had any farm (C. Q. 60), and has lived in Delaware County 34 years, and knows the defendant Hoag (Qs. 1–3); attended a fair at Delhi on Andrew Stone's land before the war; was policeman (Qs. 7–8.)

The witness was asked to describe a wire fence he saw on the Delhi fair ground before the war, and gives his best recollection as to the entire fence, but said nothing about barbs or prickers (Q. 14.) In answer to a leading question, witness admitted that there was "what we call 'pricker wire'" (Q. 15.) "Not a great many" (Q. 18.) Witness cannot tell the names of the officers of the fair (C. Q. 17.) This witness makes the following curious statement:

"C. Q. 47. Did you go up to it at all, and examine it "carefully?

"A. I did, sir.

"C. Q. 48. What did you find on the fence except the wires?

"A. I found some wire cut off in chunks and twisted around "it.

"C. Q. 49. Is that all you found?

"A. Yes; that is all I recollect of, of the fence."

Witness knows Morley, but would not be positive whether he was there or not. (C. Q. 106.) *Witness can not mention one thing that he saw at the fair beside this barb wire fence.* (C. Q. 168.)

It will be noticed that this witness has now decorated the Delhi fair fence with chunks of wire, and the fact that, al-

though he was a policeman, he cannot recollect a single thing there exhibited except this fence, has a tendency, at least, to raise the suspicion that he doesn't recollect that, except for a purpose.

A. A. Strong (Rec., p. 1384),

is the next witness; 57 years old; guess you might call me an insurance agent or a retired farmer; is acquainted with the defendant Hoag, and lived in Delaware County 53 years; attended the county fair at Delhi before the war. (Qs. 1–7.) "Saw a panel, you might call it, of wire fence, on that fair "ground" (Q. 14.) * * * "there were posts set in "the ground from 10 to 16 feet apart. My impression is it "was about 12 feet apart, but am not positive as to that; and "there were three wires from post to post. The top wire had "what we call barbs now; think at that time we called them "daggers, and I think there was one other wire. I think the "bottom wire was barbed, and my impression is there was "a few on the middle wire. I don't want to be understood "that they called them daggers; that was the term I called "them. We called them daggers when we examined it. "They were made of wire wound around the main wire. One "single wire the main wire was—twice, I think (Qs. 17, 18 "and 19.) Don't know who had it on exhibition" (Q. 21.)

Cross-Examination.

Was simply a spectator. (C. Q. 4.) Attended one day. (C. Q. 5.) Don't remember any rails or poles on the fence. (C. Q. 12.) "Saw it several times, but at the time I was discuss-"ing the matter perhaps fifteen or twenty minutes." (C. Q. 16.) "Will swear positively that the barb wire fence was in-"side the ring." (C. Q. 43.) "Don't remember but one per-"son that exhibited anything there—Mr. House—a fast "horse." (C. Q. 44.) "*Can not describe any mechanical "contrivance or device that I saw there excepting this barbed "wire fence.*" (C. Q. 62.)

If the court will take the trouble to read through the entire deposition of this witness, it will be apparent that his recollec-

tion of that fair and all its surroundings, and things exhibited, animate and inanimate, are simply impressions, and things which he ought to remember, but has no recollection of, tend to shake confidence in the accuracy of his recollection at all. It does not appear from the testimony of this witness that he was an officer or an exhibitor or interested in any way in this fair. He simply attended because he drove over the persons named in his testimony.

James Clugston (Rec., p. 1393),

resides in Delaware county, and has lived there thirty years. Attended a fair in Delaware county at Delhi. "Think it was "before the war." "Believe I only attended one fair." (Qs. 6–9.) "Saw a wire fence." "It was a three wire fence. I "think it was somewhere from twelve to eighteen feet long. "I don't remember just what it was put on, whether it "was three posts or two posts and a slat. There was barbs or "points on the wire." (Q. 11.) "I could not say whether "there was barbs on all three of the wires or not." (Q. 12.) "They were made of wire and wound around the wire." (Q. 14.) "About a foot apart or nearly so." (Q. 16). "Mr. Morley exhibited the fence." (Q. 18.)

Cross-Examination.

"Could not say anything else composed the fence be-"sides the posts and barb wire." (C. Q. 111.) "Did "not see the fence long—probably twenty minutes to half an "hour." (C. Q. 113.) "Old Morley was answering ques-"tions that were asked him." (C. Q. 118.) Could not say "whether or not it was inside the ring." (C. Q. 120.) "Don't remember anything else exhibited near it." (C. "Q. 123.) *Don't remember anybody but the man Morley who "exhibited anything at that fair.*" (C. Q. 132.) "Did not "know any of the officers of the fair." (C. Q. 142.) "Don't "remember any hogs or sheep at the fair." (C. Q. 147.) "Could not say positive I saw old man Morley after that "fair." (C. Q. 177–8.) "Think I knew this old man Morley "two or three years." (R. D. Q. 1.)

In this deposition, as in all the preceding ones, there can be found many things which shake the confidence in the reliability or attempted correctness of recollection of the witness. We most respectfully submit that a witness who cannot recollect any exhibitor at the fair except old man Morley, and who has the vaguest recollection of the location, extent and various things exhibited at that fair, is unreliable authority as to any particular thing which he may profess to recollect.

H. C. Spangler (Rec. p. 1416)

is forty-eight years old, resides at Manchester; "I don't know "what you would call my occupation; I never had any, "hardly; I am a farmer, as much that as anything." (Q. 1.) "Am in the employ of Thorpe Bros.; you can call it a clerk." (Q. 3.) Have known the elder Hoag ever since I have lived in Manchester. (C. Q. 4.) Think I came here in 1856. (Q. 4.) Knew a man we always called old Morley. (Q. 5.) Attended agricultural fair at Delhi before the war, and saw a specimen of wire fence. (Q's 9, 10 and 11.)

When called upon to describe the fence the witness stated: "Well, in regard to that I would not want to swear positive, "but I should think about either forty, thirty or fifty feet, but "I should think about sixteen feet, that is, between the posts, "I mean. * * * One strand is all, I believe. * * * I "cannot describe the wire positive, but it had some kind of a "barb on it." (Q's. 12, 13 and 15.) This testimony was given solely from his own memory and consulting with his brother-in-law. (C. Q. 1-3.) Has been twenty-two or three years since I owned property in this or any other county. (C. Q. 11). Would not say that I looked at the fair fence five minutes. (C. Q. 38.)

Verily an uncertain recollection upon which to base an assertion of peril to patent property.

Jonathan Lucinbill (Rec. p. 1445)

resides in Delaware county. "My occupation is nothing. "Came here in '56, and lived four years in Delhi, and close by "Delhi; attended agricultural fair at Delhi between '58 and

"'60." (Q. 1–4.) "Saw a wire fence or panel of wire fence "on exhibition. *Don't know as there was more than one* "*strand.* There might have been three, for all I know to- "day. I should judge it was two to four rods long. I should "judge the wire was about the size of that quill there. Maybe "not quite so thick." (Q. 6.) "Had on the strand what we "call barbs now. I don't think they called it barbs then. I "don't know what they did call it. I should judge they were "a half to three-quarters of an inch long. * * * They "were in some places, I should judge, about two inches, and in "some about four and five apart. (Q. 13.) "Saw old man "Morley around that fence." (Q. 14.)

Cross-Examination.

Did not exhibit anything at the fair; did not know any of its officers, and don't know anybody that took a premium. (C. Q. 15, 16 and 17.) There were no poles on the fence; nothing but wire. (C. Q. 30.) I was well acquainted with old man Morley. Just as soon as I came inside the gate he came to me and took me up and showed me the fence. From the time I was there we went through the fair grounds, but for remembering what things were there, I could not state, etc. (C. Q. 35.) No place there to run or trot horses to my knowledge. (C. Q. 39.) Have given my testimony wholly from memory. (C. Q. 71) "Hardly anybody who had no business to do with "him could get acquainted with him. He might pass you "twenty times a day and he would not say a word to you." (C. Q. 74.)

This barb wire fence now consists of one wire with barbs, or something on it two inches apart, according to the recollection of this witness, which is given wholly from memory.

Rollin Lewis (Rec. p. 1460)

next follows; resides near Manchester; is a farmer; lived in Delaware County since 1855, and attended an agricultural fair at Delhi before the war. (Q. 1–7.) Then saw a sample of wire fence on exhibition. "Well, there were three wires, I should

" judge, about two rods to two and and a half long. It was " strung on three, or two posts and a tree, I am not positive " which. It was a single wire with barbs, I should think the " same size as the wire, and they were a good deal longer than " the barbs they put on at the present time, and the barbs " were, I should think, ten inches apart and may be a foot." (Q. 12.)

Cross-Examination.

This witness frankly admits that, " It is a long time ago, and " this is a difficult matter for a man to tell of an incident that " transpired a quarter of a century ago. (C. Q. 2.) The man " who was blowing it there had a conversation with me, etc." (C. Q. 3.) Saw the wire but one time, the time I had the conversation with the man that was blowing it. * * * " I " might have been there fifteen minutes. I might have been " there one-half hour." (C. Q. 7.) Witness gives his testimony from " nothing, but my memory, sir." (C. Q. 55.)

It does not appear that this witness was an officer or an exhibitor personally at this fair, or was interested in it.

S. S. Squires (Rec. p. 1472)

is fifty-three years old, and resides in Delaware County since 1852; moved away and returned to Delaware County in 1858; thinks he attended every agricultural fair at Delhi before the war. (Qs. 1–7.) " Think I first saw barbed wire in Delaware " County at or near Delhi." (Q. 9.) Could not state what year. Should think it was somewhere between '58 and '60. (Q. 13.) " The wire that I saw there was on, I think, posts, or " perhaps one tree and two posts. It was like a panel or fence, " the top wire was barbed. Had barbs on it, or wire of about " the same size put on as barbs—coiled barbs."

Cross-examination showed this witness lived eight miles from the Delhi County fairs; was not an officer or manager (C. Q. 1 and 2); did not exhibit anything at the fair. (C. Q. 7.) Witness attended fairs upon two fair grounds, about three-quarters of a mile apart, near Delhi. (C. Q. 13 and 14). Witness could not swear upon which of these fair grounds he saw barbed

wire (218). Thinks it was exhibited as a curiosity. (C. Q. 24.) Witness could not mention any mechanical device or machine that was at all unusual which he saw before the war. (C. Q. 27.) And gives his deposition solely from memory, as near as possible. (C. Q. 29.)

This witness completes the list of parties called to establish the existence and identification of a sample of barbed wire fence alleged to have appeared in Delhi at one of the fairs before the war.

Cui bono? What have the above depositions proven? Have they proven the existence of the Glidden structure, or any barbed wire structure, or any definite barbed wire structure at the Delhi fair before the war? We respectfully submit, far from it. What kind of a fence can be ascertained with any definiteness or distinctness of construction from the above depositions, and what do these depositions aggregate other than a conglomerate mass of statements which, sifted and compared, produce nothing of certainty or reliability. The fence itself is born in an atmosphere of contradiction, and having about it many earmarks of fraud. One witness, Bates, swears in detail to its construction. Another witness, Du Bois, swears, with equal positiveness, to another manner and origin of construction. Neither of those witnesses have any record of character or standing to give credence to their testimony, one being a confessed criminal and the other a man of no occupation. Many of the above witnesses testified as to this same subject-matter in former suit of the same complainants against the Grinnel Wire Company. What can your Honor say was the thing which these witnesses profess to have seen at the Delhi fair prior to 61? Some of them describe a fence tied to a tree and extending from post to post; some of them describe a fence all posts and no tree; some of them a fence ten feet long and some sixty; some a fence one wire high and some four or five; some a fence with one barbed wire and some three or four; some a fence with bunches of wire attached to it; some a fence with a board hanging to the top wire; some a fence with a board nailed from post to post; some a fence with a rail or pole nailed upon the top of the fence; some a

fence with boards hanging to the top wire, and depending boards from the top wire parallel with the posts and hanging down over horizontal boards. Some locate the fence on one fair ground, some on another. What can be determined from such conflicting testimony? What made certain? We note the curious fact, however, that, with two or three exceptions, all of these witnessess cling, with the death grapple of a drowning man, to the statement that the barbs on whatever kind of a fence was there, were, to their "best recollection," made of wire, and formed by wrapping round the main wire. This peculiarity of recollection of this detail of construction, this vagueness of recollection as to all else, is highly conclusive to the belief that what they attempt to remember they do not remember, and what they might remember, if ever existing, they have forgotten. *The deposition of all these witnesses being given from memory only.*

"Delhi Fair Wire Exhibit."

A careful examination of this Exhibit, as frequently happens, discloses apparent fatalities inherent in the device itself, which conclusively contradict the story told by the defendants' witnesses—Potter and Bates—as to its use and origin.

The angle of bevel upon three of the points of the barbs on this exhibit are so uniform and entirely coincident throughout, that it would be next to an impossibility to produce such an angle by the use of shears, chisel or cutting device described by the witness Bates, and such angles make it certain that the bevels or points of those barbs were cut by some machine or in some gauge which would secure almost absolute uniformity. Of course, the wire would have to be straight to produce this uniform angle of bevel, and the difference in the angle of bevel shown on one of the barbs near a crook, accounts for the difference of bevel in that barb. Experts in wire handling can also easily determine by an examination of the wire whether it has been severed by a chisel or a shear cut, the shear cut always leaving a slight ridge or broken portion at or near the middle of the wire, where the edges of the shear break the

metal without cutting it. A chisel cut always leaves a somewhat broken edge on the farther side of the wire where the point of the chisel breaks through.

Complainants examined in connection with this Delhi Fair Wire Exhibit, a prominent practical manufacturer of wire goods, having back of him an experience of more than twenty years, Mr. John A. Booth, of Chicago. Mr. Booth after stating his qualifications, and having examined carefully this Delhi Fair Wire Exhibit with a magnifying glass, states that in his opinion it would not be possible with a pair of shears to produce the cut forming the end of these barbs, the opinion of Mr. Booth being also that it would be impossible simply by hand with a pair of shears to cut the uniform bevel upon three of the points of the barbs; the witness also stating that he detects no difference as to hardness or stiffness between the barbs and the wire, and, in his opinion, it is not possible that the barbs forming the wire had been softened and annealed before being placed upon the wires. (Record, p. 456.) This testimony goes far to contradict the statement of the witness Bates to the effect that the barbs on the Delhi Fair Wire Exhibit were cut with a pair of shears by hand, or that they were annealed in a wood fire before being coiled around the fence-wire. There is another fact alleged by Bates in connection with this exhibit also apparent from this Delhi Fair Wire Exhibit that we believe the court by personal experiments can convince itself of the falsity thereof.

Bates states that he put those barbs on himself by coiling them with certain irons around the fence-wire, THE BARBS HAVING FIRST BEEN CUT AND FASHIONED. Your Honor will notice that each of the points of the barbs extend at an equal distance from the main fence wire, and a careful measurement can discover no practical difference in length. We most respectfully submit that it will be impossible for your Honor, or any other party, to take these tools of Mr. Bates and take barbs already fashioned and coil such barbs upon the fence-wires, leaving an exact length of point to each barb. Long practice perhaps might insure some certainty as to this result, but we believe that the court can convince itself of the great difficulty of this

performance by attempting it. The barbs on that Delhi Fair Wire Exhibit have either been placed there by an automatic machine, or if coiled by the tools introduced by Bates in connection with his deposition, they have been coiled first and then cut off by measurement, so as to leave an exact uniformity as to length of the projecting points.

We have great confidence that this case, in the present efforts of the defendants, has not been taken out from under the decision of Judge Brewer, and that we can rest content that the decision and criticism of his Honor in passing upon this fence is equally applicable under the facts as they stand to-day; and that complainants could have rested with entire confidence on this conclusion without testimony upon their part, as to this romance of the "Delhi Fair Fence," but complainants did not so rest.

COMPLAINANT'S TESTIMONY IN REBUTTAL OF DEFENDANT'S DELHI FAIR FENCE.

Frank S. Morley (Rec., p. 50.)

was the first witness called by complainants as to matters which bear directly upon the fact of any connection by Mr. Morley with this Delhi fair fence. He is a farmer, resides in Bradford county, Pennsylvania; is a son of Alvan Morley, who died in the insane asylum at Harrisburg, Pennsylvania, in 1868, in which he had been an inmate for a little over a year. His father owned land in Iowa, and spent a portion of the time between '52 and 62 there. Would come home occasionally, sometimes would come home in the fall and stay till spring, once was brought home insane before 1861. Witness then states that he kept a diary from the year '58 to '67, inclusive, and had it with him upon the examination, the entries being in his own hand. (Qs. 12 and 13.) His father's farm in Pennsylvania was about sixty-five acres. The witness then goes on to state that he is familiar with barb fence wire, has it upon his farm, and that his father talked about his affairs in Iowa to him, and that his father never at any time stated, mentioned or intimated to him or to

his knowledge that he ever had invented or knew anything about barb fence-wire or barbs upon wire, and that his father never had anything of that kind about his farm at Pennsylvania. (Qs. 18 and 19.) It appears by this testimony that Mr. Morley usually went home to Pennsylvania in the fall and returned in the spring. In the diary of this witness there appears the entry under date of September 26, 1859, as follows: "September 25th. We got a letter from Iowa, stating that "father is very sick with the bilious fever. And under date "of October 3d, as follows: "October 3d. I went to the post "office this morning and got a letter stating that father is bet "ter." Several of the defendants' witnesses have located the fair at which they saw this barb wire in the fall of 1859. Positive testimony hereafter produced, in the shape of the paper published containing the fair proceedings, shows that the fair in 1859 was held October 1st and 2d. The above entry makes it positive that Mr. Morley attended no fair in 1859 at Delhi. The witness states that they considered his father's mind unsound, but at times better than at others, and that he was judicially declared a lunatic in Pennsylvania in March, 1864 (Qs. 29–31), the witness further stating as to his father that he "*never knew of his attending a fair, and I never knew of his "exhibiting anything in a crowd.*" (Q. 33.)

This deposition goes far to establish the presumption that the defendants have made a serious mistake in associating Mr. Morley with this alleged Delhi fair barb wire incident, and establishes with reasonable certainty, that he was not at the fair at Delhi in the fall of 1859.

Samuel W. Miller (Rec., p. 54.)

was next called by the complainants, who is a son-in-law of Mr. Morley, and married his daughter at the homestead in the fall of 1851; resides at Waverley, New York. The witness states that between the year 1852 and the time of Alvan Morley's death, he was of unsound mind; "sometimes he would be more rational than others." (Q's 3–7.)

Morley had been declared judicially insane at Dubuque,

Iowa, in 1853. (Q. 9.) He was brought back insane twice after 1853. (Q. 15.) He sometimes came home in the fall, and returned again in the spring. (Q. 17.) This witness never heard of or saw him making barbed wire of any description, or using it, and never heard him talk about barbed fence-wire, nor ever intimate that he had any knowledge or conception of any such thing. (Q's. 19–20.)

Sarah A. Clapp (Rec. p. 67)

was the next witness. She resides at Bloomington, Nebraska lived in Delaware County, Iowa, between April, 1861, and Feb ruary, 1867. Mrs. Clapp and her husband came from the same part of Pennsylvania as Mr. Morley, who was acquainted with their relatives there. (Q's. 2, 3 and 4.) It appears by this deposition that Mr. Morley boarded and lived with Mr. and Mrs. Clapp a considerable portion of the time between the year 1861 and the year 1867, and they were fully and intimately acquainted with him, his habits, methods of thought, purposes and desires. (Q's. 8, 12, 13, 14, 17, 18, 26 and 32.) During all those years Mr. Morley never intimated or stated to Mrs. Clapp, or to her knowledge, that he had any thought or conception of barbed fence-wire, or fence-wire with sharp points upon it in any manner. (Q. 33.) Bearing on the point of whether Mr. Morley was the kind of a man who would make an exhibition of himself on a fair-ground, as described by defendant's witnesses, Mrs. Clapp says: "I never "knew him to go to a fair; I never see him go to a large gath- "ering like the 4th of July. He didn't like to sit at my table "if I had strangers there; he'd rather wait and eat alone."

Mr. Clapp (Rec. p. 75)

corroborates all the facts testified to by his wife and testifies that, "I never heard him say a word about barbed "wire, or anything of the kind." (Q. 32.) Showing the bent of Mr. Morley's mind, this witness stated: "He talked "about getting up a hood with glasses in to wear out in "the storm. He did make quite a number of 'em, but they

" didn't prove to be very good. He would talk about making " a flying machine. He said he thought he could make one " that would fly through the air like a bird. He was going to " name it 'The Bird of Paradise.'" (Q. 39.) Mr. Clapp stated that "the most of folks called him 'Crazy Morley.' * * I " never knowed him to go to a fair. He went once up above " Manchester to a 4th of July celebration. Knew him to go to " Manchester once to some other doings there, and that is all the " public places that I knew him to go to." (Q's. 43–46.) The witness stated, that to his knowledge, Mr. Morley never had anything to do with the two defendants' witnesses, Steve Potter and the blacksmith, Bates. (R. D. Q. 3.)

Leverett S. Stone (Rec. p. 110),

called by the complainants, resided at Delhi from 1854 to '62 '65 to '73 and '84 to the present time; knew Alvan Morley, think in the year '59. (Q's 1–4.) Mr. Stone is the son of Andrew Stone, upon whose farm the Delhi fair was held prior to the war. He testified there were only two fairs held on his father's farm prior to the war, and locates them in the years 1859 and '60. (Q's 6 and 7.) Witness assisted in preparing the ground and in making the track of the fairs, and introduced a plat of the ground. (Q's 10–13.) Mr. Stone was present at both fairs, one of the police one year. (Q. 16.) Witness testifies that he was familiar with barbed wire or fence wire with sharp points upon it, and that nothing of the kind was exhibited at either of those fairs, and that after the fair was over there was nothing left on the ground that was taken there to be exhibited. (Q's 18 and 19.) Mr. Morley was considered crazy or a crank. (Q. 21.) Mr. Stone testified in a former case.

Samuel F. Parker (Rec., p. 131),

resides in Delaware county, Iowa, and lived in Delhi from 1854 to 1859, was mayor of Delhi and ex-sheriff and deputy sheriff of Delaware county. (Q's 1–4.) Two fairs were held on Andrew Stone's farm prior to the war. Thinks they were held in 1858–59. Witness knows he was marshal at one of

the fairs, and thinks he was at the other. (Q's 5, 6 and 7.) Was on the fair-grounds at both fairs nearly all the time. (Q. 8.) And knows what barbed fence wire is, saw no barbed fence-wire or fence-wire with barbs or sharp points upon it of any kind at either of those fairs, and does not believe such a thing could have been there without his seeing it or knowing of it. (Q's 5–11.) Knew Mr. Morley and that he was called "Old Crazy Morley." (Q's 12 and 13.) Witness testified in a former case.

Dr. Albert Boomer (Rec., p. 159),

next testified for complainants. He has lived in Delhi, Delaware county, Iowa, thirty-two years; thinks there were three fairs held on Andrew Stone's farm prior to the war; attended no fairs except those held on Andrew Stone's farm; was in frequently during each day of the fair. (Q's 1–7.) Knew Alvan Morley first in 1858 or 1859. (Q. 12.) Did not consider him of sound mind. (Q. 29.) Witness is acquainted with barb fence-wire and states that he neither saw personally, nor heard any talk or conversation about any such thing at either of those fairs. (Q. 14.)

Jas. O. Ball (Rec., p. 191),

then called by the complainants, lives in Delaware county, and has lived for thirty-three years last past near Delhi. Attended two fairs on Mr. Stone's farm there in '59 and '60, every day of the fair; was on some committees and had some stock there. (Q's 7 and 8.) Witness owns a farm fenced largely with barbed wire and testifies positively that there was at neither of those fairs held on the Stone farm before the war any panel or length of fence composed of fence-wire with barbs or sharp points upon any part of it, or any barbed wire exhibited at those fairs. (Q. 11.) Knew Mr. Morley at that time, and knew him well. (Q. 12.) All thought him a little off—shattered. (Q. 27.)

Elijah P. Tubbs (Rec., p. 225),

has lived in Delhi, Delaware county, since 1851, but was absent from May, '61, to November, '66.

(Q's. 1–4.) There were but two fairs held on Andrew Stone's farm prior to 1861. These were held in 1859 and '60. (Q. 8.) "I was there every day from morning till night." (Q. 10.) There was no panel of barb wire fence or fence-wire having sharp points upon it in the shape of a fence, at either of those fairs. Knew Alvan Morley before 1861. (Q. 14.)

George W. Clapp (Rec., p. 237),

Mr. Clapp's deposition appears upon page 237 of the record. He is a farmer, and the son of Mr. and Mrs. Clapp, who have already testified. Was in the army in '64 and '65, but knew Alvan Morley well after April, 1861 (Q. 3–9.) Mr. Clapp testifies that he never at any time heard Mr. Morley state or claim that he knew anything about barbed wire, and never saw anything of the kind around him. (Q. 38.)

George W. Long (Rec., p. 373),

is a farmer, and lives in Delaware County. (Q. 1.) Mr. Long states that he knew Mr. Morley pretty well by sight for as many as a dozen years, and that during that time he knew something of his business. (Q. 13.) He came to him for information as to how to apply for a patent. Mr. Long attended the county fairs held at Delhi before the war, and is unable to recall any barbed wire fences, or that Mr. Morley ever stated to him that he had any knowledge or conception of any such thing. (Q.'s 24, 5 and 6.)

Eliza Morley. (Rec., p. 794),

This witness was the wife of Alvan Morley; is now living in Bradford county, Pa., and states that her husband was in the lunatic asylum at Harrisburg some 18 years ago. Q.'s 1–4.) Spent more than half of his time west for a good many years. (Q. 6.) Returned west in the spring, and stayed until the fall. (Q. 7.) He always talked with me fully about what he did and what his plans were while in Iowa. (Q. 9.) A part of the time he was more or less sane, and part of the time he was pretty bad. Before he was deranged, he

was a pretty smart man. (Q. 12.) The witness then testifies that she knows what barbed wire is; she examines the Delhi Fair Wire Exhibit, and states that she never saw any barbed wire except on the roads there; that her husband never had any barbed wire when he was with her, and never said that he had seen or knew anything about such wire, or wire with sharp points upon it. (Q's. 15 and 16.)

George Morley (Rec., p. 796),

Another son of Alvan Morley, resides at Bradford county, Pennsylvania (Q.'s 1–3); his father lived in Iowa a portion of the time (Q. 5). Witness visited his father between 1858 and 1860, near Manchester, at his mill (Q.'s 6–9). Stayed there about three weeks (Q. 11). Saw his father during his visits back home to Pennsylvania during the last twenty years of his life. Witness knows what barbed wire is, and was shown the Delhi Fair Wire Exhibit (Q.'s 20, 21). Witness states that his father never at any time claimed to him that he had ever gotten up or knew anything about barbed wire, or about putting sharp points on wire, for any purpose or of any description (Q. 23). Did not consider his father of perfectly sound mind during any of the time (Q. 26).

Adeline M. Miller, (Rec., p. 801).

A daughter of Alvan Morley, residing at Waverly, New York, testified that her father spent the last twenty-five years of his life back and forth between Iowa and his home in Pennsylvania. She was at home a great deal. Sometimes he was very bad and sometimes he was more rational (Q's 2-6), Witness knows what barbed wire is, and has seen it, and to her recollection her father never spoke to her about anything of that kind, or about barb wire fencing (Q.'s 8–9),

Jane Murray, (Rec. p. 790),

Is another daughter of old Mr. Morley; resides at Waverly, New York; states her father died in a lunatic asylum at Harrisburg, Pennsylvania; spent a portion of the last twenty-five

years of his life in Iowa. He was back and forth (Q 5). We hardly considered him sane at any time (Q. 6). Witness knows what barb wire is. Her father talked freely with her about his affairs when he was back and forth, and during all that time he never stated to her that he had ever seen or knew anything about barbed wire, or about putting sharp points on fence-wire (Q.'s 7, 8, 9), Only lived four and one-half miles from her father's (C. Q. 12). Witness testified that her father when in ill health boarded with the Clapp people, and when he was well he boarded himself, and Mrs. Clapp did his washing, bread-making and butter-making (C. Q. 17).

John H. Murray (Rec., p. 792).

is the husband of the last witness (Q. 3). Knew old man Morley when he was old enough to know anybody (Q. 8). Used to see him, often when home from Iowa (Q. 10). Visited him in Iowa at the Clapps' in 1863 (Q. 11). Witness also knows what barb wire is, and that Mr. Morley never had with him any barb wire or fence-wire with sharp points on it to his knowledge, and witness never saw any barb wire at that time (Q. 17). And Mr. Morley never stated or intimated to witness that he knew anything about barb wire or putting sharp points on wire (Q. 18).

Frederick B. Doolittle, (Rec., p. 469),

a banker and farmer, and a resident of Delhi for thirty-seven years past, testified that the County fairs were held at Delhi before the war (Q.'s 1–7); that he took an active interest in the fairs, as he was then in the fruit and nursery business, and was a constant attendant (Q.'s 9 and 10). He knew Alvan Morley probably about 1855. Witness is also familiar with barb wire and has examined the Delhi Fair Wire Exhibit, and states that to his knowledge no such thing was exhibited at any County fair on the Stone Farm at Delhi before the war, and he thinks it would have been impossible for any such device to have been exhibited without attracting his attion and coming to his knowledge (Q.'s 15 and 16).

Wallace W. Potter, (Rec., p. 451),

was then called. He resides at Decatur County, Kansas, and is a farmer; was born in Delaware County, and lived there for twenty years thereafter (Q.'s 1–4). He is the son of Stephen Potter, and always lived with his father (his father being the Steve. Potter who produced the Delhi Fair Wire Exhibit and testified for defendants). This witness testified that during the time he was at home he was familiar fully with all the household articles of every description contained in or about his father's house (Q. 13). He also knows what barb fence-wire is. He was familiar with the old trunk concerning which his father testified, in which the relics were kept, and that there never was but one old trunk around his father's house. (Qs. 15–20) His father kept his razor in this trunk, and he used it once a week, and he knew the contents of this trunk. (Qs. 21–25.) Went to Nebraska in August, 1872, but was home 1876, 1878 and 1881 (Qs. 11 and 12). The witness then examined the Delhi Fair Wire Exhibit, and states that that piece of barbed wire or any other piece of barbed wire was never in that trunk, and that no barbed wire of any description was ever around his father's house prior to 1872 when he left, and that the first time his father ever said anything about barb wire or about putting barbs upon wire was in 1875, when they put on barbs with pinchers. (Qs. 26–29.)

This deposition puts an end to the effort of his father, Mr. Steve. Potter, in behalf of the defendants. The defence, seeing the fatal effect of this deposition, attempted to shove in what purported to be an affidavit of this same witness to the effect that the witness had been drinking when he gave his deposition, and other scurrilous matter. This paper is without the slightest justification in this record, was drawn by one of the defendant's counsel, and it is only by the exercise of the widest charity that we can conceive that the witness Potter ever knew its contents. As a complete refutation of any suggestion of truth in this paper called an affidavit, we can refer to the deposition of one of the defendant's, Thompson, himself, which shows that after this witness Potter left the

stand, this defendant, Thompson, followed him out, was on the street with him, and the defendant, Thompson, went to his hotel, the Sherman House, in Chicago, and took dinner with him. This paper, however, does illustrate one fact, and that is the influence and control which these defendants have in the fabrication of statements which have not the slightest foundation in fact. This witness lived in a distant and inaccessible part of Kansas. He knew nothing about the performance of his father, and with his mind unprejudiced in any manner except to state the exact truth, went upon the stand and told the story exactly as it appears here, and there is and can be not the slightest particle of doubt of its truth exactly as there told.

John L. McCreery (Rec., p. 783),

a resident of Washington, and a stenographer in the Interior Department; resided in Delaware County from April, 1857 to the end of the year 1863; went to Delhi early in 1859, and remained there till the end of 1863. Q.'s 1 and 2) Bought an interest in and was the editor of a weekly newspaper in Delaware county, called "The Delaware Journal." It was the only paper then published in Delhi, except a paper called "The News," published about a year. (Q. 4.) The paper was in my sole charge; I was the only editor, and set a large portion of the type. (Q. 5.) Collected the news for it. (Q. 6.) Citizens all over the county were my subscribers. I collected the news. (Q. 10.) I attended two or three fairs at Delhi before the war while I was publishing my paper. (Q.'s 7 and 11.) Know I was upon the ground a considerable portion of each day—half the time during its continuance. "My principal purpose in attending the fair "was to see what was there on exhibition and to see what was "going on in order to make notes thereof for use in my paper. "I intended to see whatever was to be seen." (Q. 12.) The subject of fences was much discussed at that time. (Q. 14.) Mr. McCreery then states that during the two fairs held at Delhi, he has no recollection of seeing any barbed wire-fencing of any description. (Q. 50.) He then introduces

a portion of copies of two papers edited by him at the time of the fair, during the years 1859 and 1860, and recognized the matter therein as his own composition. (Q's 16, 18 and 19.) No mention of barbed wire made in either of these papers or of anything that could be mistaken for barb wire. (Q. 20.) These papers appear in this record as "Complainant's Exhibit McCreery 1859 Paper" and "Complainant's Exhibit McCreery 1860 Paper." Witness states that it was his purpose to mention anything that attracted notice at the fair in his paper. (Q. 20.) It will be remembered that all the witnesses testified that the last fairs held in Delaware county before the war were held on Andrew Stone's farm at Delhi. A number of the witnesse testified that only *two* fairs were held on Andrew Stone's farm, among whom were Leverett S. Stone, son of Andrew Stone. The papers offered in evidence identify those two fairs as being held in the year 1859 and '60. The silence of these papers containing a full and detailed list of every thing connected with those fairs which was either entered or would attract attention, is testimony of a very high character as to the mistaken conception of the defendant's witnesses relating to this Delhi fair fence. This grave error of defendant's witnesses becomes more apparent when we consider that the fact is made certain by record evidence that in 1859 Mr. Morley was unable to attend any fair at Delhi, and there is a very strong presumption that he was not in Iowa to attend any fair in the fall of 1860. We leave the discussion of this Delhi Fair Fence, with the highest confidence that your Honor will entirely acquiesce in our belief, that the conclusion of Judge Brewer in relation thereto is correct and that the same is undisturbed by any attempted revamping of this fence by these present defendants.

Old Morley's Traveling Cow-Pen.

It is asserted by eight witnessess, upon the part of the defendants, that at some time near the Delhi fairs, or a short time thereafter, Mr. Morley built a traveling cow-pen, which was a pen with three sides, having a wheel under each corner and a stanchion arrangement or place upon one side through

which the cow's head could be fastened or placed, the supposition being that the cow was inside of the pen, and, when feeding, would crowd against the movable pen in reaching for the grass and in this manner push it along. This contrivance was to be placed out on the prairie, and, of course, the owner would have but slight difficulty in finding his cow when desired. These eight witnesses describe this cow-pen as being constructed of posts and boards, with the upper part of it *composed of barbed wire*, although the witnesses do not agree as to form of construction. There is no dispute as to the existence of this cow-pen, but complainants deny entirely that there was any barbed wire forming any part of it.

H. L. Bates (Rec., p. 1321.)

was first examined by the defendants as to barbed wire upon this cow-pen. This is the same H. L. Bates who testified regarding the construction of the Delhi Fair Fence. Mr. Bates states that he made a piece of barb wire about thirty feet long for Mr. Morley's cow-pen, and made it all himself. (Q's 34 and 35.) The pen was on Morley's farm east of Charlie Grommons. (Q. 38.) In answer to Q. 49 Bates describes this cow-pen and its mode of operation, and states that the pen was made in 1861 or 1862. (Q. 52.) Witness then swears that this barbed wire on the cow-pen "was put on the top of the posts "over the boards, and was put there to keep other "cattle out, I suppose; that was what he said it was for." (Q. 69.) Bates swears that he made the cow-pen wire *before he left his shop on the farm.* (C. Q. 79.) He left his farm in March, 1860. (C. Q., 35.) Lived in Manchester after that time. (C. Q. 40.)

T. W. Robinson, (Rec., p. 1307.)

horse dealer, and the same party who testified as to the Delhi fair fence, testified that Morley showed him a piece of barb wire that he wanted to get patented and several other things; one was a patent cow-pasture, and that he "wanted to raise

" means for the purpose of getting this wire that he had with " him, and the cow-pasture, patented, and wanted me to go in " with him." (Q. 18, C. Q. 19.)

D. I. Johnston, (Rec., p. 1372.)

carpenter, residing at Manchester, and is acquainted with the two Hoag defendants, has lived in Manchester since 1856; knew Morley, acquainted with him in 1857, must have known him seven or eight years. (Qs. 1–6.) Testified that he saw barbed wire on a kind of calf-pen. (Q. 29.) Describes it as follows: " Why, it had posts in it to fasten the wires on it, " with those prickers on. I could tell you why I called them " prickers. In those days there was no other name for them." * * * The calf-pen, I should think, was about twelve by twenty. (Q. 30.) You could pick it up and move it. (C. Q. 9.) Two barb wires run clear around the calf-pen between the boards, all but a gap where he went in at one corner. (C. Q. 20.) Never noticed the barb wire after the first time I examined it. (C. Q. 45.) Never saw any calf in the pen. (C. Q. 56.) Saw the calf-pen in 1859. (C. Q. 100.)

Vernon Burrington (Rec., p. 1406.)

resides at Manchester, is acquainted with the elder Hoag and Thompson. (Qs. 1–4.) Saw barbed wire that Mr. Morley made between 1858 and 1860. (Qs. 6 and 7.) Was on the fence he made to put cattle into—a portable fence (Q. 19), " with a board at the bottom and a board at the top and " two barbed wires in the center on three sides of it—that barb " I examined." (Q. 20.) It was down at his mill at Maquoketa. (Q. 21.) Portable cow-pen was seven or eight feet square, a little longer than it was wide. (C. D. 13.) " The " critter stuck its head in and there was four little wheels un- " der it, and it shoved it ahead and moved it." (C. Q. 14.) Never saw it but once at the mill. (C. Q. 21.) No cow in it. (C. Q. 26.) Saw it once with a cow in it, eighty or a hundred rods off, I should think. (C. Q. 18.) This witness then swore that *the critter was on the outside of the barbed wires and cow-*

pen and that its head was inside and its body was outside, and the critter rolled it in front of it. (C. Q. 30 and 31.) The cow could not get his head out of the pen until somebody took it out. Two barb wires all around except where the cow was. (C. Q. 34.)

This witness evidently frankly admits that he would not think much of an old friend of twenty years standing who would not recollect something to help him out of a lawsuit that happened twenty years ago. (C. Q. 61.)

Charles Towner, (Rec., p. 1430.)

thirty-three years old, renting a farm, knew Alvin Morley, generally called "Old Morley." (Qs. 1–4.) Saw barbed wire on a kind of a patent calf pasture he had. (Qs. 56 and 57.) Was a calf pasture that rolled on wheels. Was made in a three-cornered shape. Think there was one calf and a cow, or two cows in it. (C. Q. 53–57.) Might have been ten or eleven years old then. (C. Q. 59.)

John Lillibridge (Rec., p. 1478),

lives in Delaware county, owned 450 acres, lived there since 1854. Knew old Morley. (Q's. 1–4.) Knew him from five to seven years. (Q. 6.) Saw him have a traveling cow-pen that he kept his cow in. Cow-pen had wire on it with barbs. (Q's. 20–23.)

Ichabod McDonald (Rec., p. 1486),

resides at Manchester and not doing a terrible sight. Lived here off and on for thirty-seven years. (Q's. 1–3.) Knew a man called Morley as much as twenty-five years ago. Saw barbed wire at Morley's mill on the cow-yard, and a cow inside of it. The yard might have been one or two rods. (Q's. 6, 7 and 8.) Seems to me it was just before the war—twenty-four years ago, anyway. (C. Q. 6.) Don't think I saw it more than once. (C. Q. 8.) I don't

know whether it was a movable cow-pen. (C. Q. 12.) Barb wire was on top, above the boards and posts. (C. Q. 15.)

A. R. Loomis (Rec., p. 1489),

resides at Manchester, describes himself as a banker, a farmer and a man of leisure a small portion of his time. Is an old friend of the Hoags. (C. Q. 1.) Lived in Manchester thirty-one years. Knew old man Morley. (Q's. 1–4.) "He came "into the store and had a small piece of wire in his hand. "He spoke of it as being good for fences, but what he said I "can't now say. I did not take the wire in my hand. He "had something on it that he called a barb or —— He was "also showing something that he had got up for penning cat-"tle * * * My idea is that it was a short piece "of wire not more than a foot long, may be not that. Think "another piece of wire went around it, but in what shape it "was bent or cut I could not say." (Q's. 6 and 7.) "Q. 8. "Was that piece that was bent around what he called the "barb, or something else? A. I could not say as to that. "It was very little that I heard him say about it. I was in "my store and busy and paid very little attention." I think that it must have been during the war.

Complainants' Testimony in Rebuttal of Old Morley's Traveling Cow-pen.

As above indicated, there is no dispute as to the existence of a traveling cow-pen constructed by Mr. Morley a number of years ago, and it is respectfully suggested that such traveling cow-pen is a practical demonstration of the mental condition of Mr. Morley, such a device being practically inoperative and useless as a mechanical structure well could be; but complainants deny that such traveling cow-pen was built by Mr. Morley at the time stated by the above witnesses, and do deny that barbed wire formed any part or element of its construction. Apparently, nothing could be more senseless or useless than arming such a contrivance with barbed wire. A cow penned up in such small compass, with barbed

wire upon every side of her, would be in such a position of torture and torment that no sane person would for a moment subject her to. Complainants, however, have abundant and ample proof of the construction and character of this cow-pen, as the original patent issued to Mr. Morley was obtained of the family and produced. This traveling cow-pen was, undoubtedly, the great mental conception of this man, and upon which his diseased mind lavished itself. It will be remembered that this patent was found upon him at the insane asylum and taken by his son from his dead body at that place. This patent appears in this record as "Complainant's Exhibit Morley Patent." An examination of the drawings and specifications of said patent shows distinctly that no part of said traveling cow-pen was made of wire of any kind, much less of barbed wire, and there is not the slightest intimation or suggestion in said patent that barbed wire of any description could be used upon or in connection with said traveling cow-pen. The description in the specifications is exceedingly erratic. The specification indicates that a number of these cow-pens when constructed can be joined together by a wire for flexibility and locomotion, but there is no intimation of the employment of any points or barbs upon the wires. To make this matter more certain, complainants procured a copy of the file wrapper and contents of this Morley patent, which appears in this case under the identification of "Complainants' Exhibit File Wrapper & Contents Morley Patent." This file wrapper and contents discloses the fact that Mr. Morley applied for the patent himself without the assistance of any attorney, and it is interesting in throwing light upon the defendants' assertion relating to Mr. Morley's connection with barb wire. The patent was applied for in January, 1866, and issued in July of that year, a date five or seven years after the witnesses of defendants locate the cow-pen construction and use. This file wrapper and contents contains the exact form of expression and chirography of Mr. Morley in his various communications to the patent office. It appears by these communications, especially the one under date of March 30, 1866, that this was Mr. Morley's first patent, and that in that letter

he sent the patent office a paper containing his advertisement relating to his other inventions, and under date of March 2, '66, Mr. Morley writes the patent office as follows: "I here-"with send you newspaper with my advertisement in it, which "I hope will secure my right of letters patents until I can "raise the money to patent it. If not please let me know. I "have more inventions in my head." Complainants have produced the newspapers referred to, and the "inventions" there disclosed are more wild and chimerical than the travelling cow-pen, such advertisements being as follows: The first notice is under date in the paper of March 16, 1866, as follows: "Notice: Alvan Morley, of Delaware county, Iowa, has in-"vented a new broom and a railroad grader which he intends "to get patented. Description: Broom is made of two bands "of fence-wire, and two hooks of same, passing through the "handle, and hook over the wires on both sides. The grader "consists of two iron shafts, say thirty-two feet long, with "thirty-two plows on, cast in a screw, to be propelled by steam "or by wind. Manchester, March 5, '66" The second notice is of newspaper date of March 23, 1866, and is identical with the above, with the following addition; "He "also claims the right of letters patent for using corn and "sorghum stock for fuel, to be fed onto the fire by clock-work "machinery propelled by a weight." This advertisement is also dated March 5, '66.

There is nothing in all this that has the slightest relevancy or suggestion of barbed wire, but to make matters certain, complainants called a number of witnesses who actually knew the construction and operation of the cow-pen, and knew there was no barbed wire forming any part of it.

Frank S. Morley, (Rec. p. 50),

son of Alvan Morley, whose testimony has been before presented regarding the Delhi fair fence, testified as follows regarding this traveling cow-pen. He testifies that his father's patent was brought home with him after his death, and that his father never took out any other patent than this one. (Qs. 28-32.) His father talked to him about this

traveling cow-pen, showed him a model of it. (Qs. 21-23.) And that he never saw any barbed wire or heard his father say anything about barbed wire. (Q. 19.)

Sarah A. Clapp, (Rec. p. 67),

the same witness before examined upon the Delhi fair fence, lived with her husband upon Mr. Morley's land adjoining Charlie Grommon's in March, 1866, and remained there until March, 1867. (Q. 18.) Regarding this cow-pen, Mrs. Clapp testified as follows:

"Q. 34. Do you remember a moving stock-pen or yard got-"ten up by Alvan Morley while you knew him; and if so, "please describe it.

"A. He got one up, I remember in the summer of '66, it "was made with three wheels and three sided, I call it; he "had it made with boards; he had it out in front of our "house in the Miller place.

"Q. 35. Did he ever have more than one such device, do "you know?

"A. I never saw but one; I don't think he had; I should "have known it; he boarded with me all that summer.

"Q. 36. Was there any barbed wire of any description on "that moving stock-pen?

"A. No, I think not; I never saw any; nothing but boards.

"Q. 37. Please look at the drawings or pictures shown "in 'Complainant's Exhibit Morley Patent,' and state whether "such represents the movable stock-pen Mr. Morley made?

"A. It's a good many years, but I think it resembles it very "much; but I know this, he had no wire on it."

Benjamin Clapp, (Rec. p. 75),

the same witness before examined, describes this movable cow-pen, recognizes the patent as representing it (Q.'s 27-28), and swears that there was no barbed wire or wire of any description upon it. (Q. 34.)

Charles H. Grommon, (Rec. p. 88),

was then called, and he is the Grommon who has lived on his farm now occupied by him since the year 1852. Q.'s 1 and 2.) Knew Mr. Morley, became acquainted with him in 1856; Mr. Morley frequently stopping at his house thereafter, he owning 160 acres east of him. (Q's 8-11.) Mr. Grommon remembers this traveling cow-pen, and states that Morley had it on the prairie outside of his place, and then describes it. (Q.'s 33, 34 and 35.) Recognizes the patent as representing this cow-pen. (Q. 42.) Mr. Morley never intimated to him that he had made or conceived or knew anything about barbed wire or sharp points on fence-wire (Q. 43.)

Leverett S. Stone (Rec., p. 110),

the same witness examined regarding the Delhi fair in behalf of the complainants, remembers this movable cowpen and describes it; recognizes the drawing of Morley's patent as representing the same; says that he saw the pen a number of times and it was south of the house where he lived, adjoining Grommon's, and that there never was any barbed wire of any description upon it. (Q's 23–27.)

Luther M. Davis (Rec., p. 135),

is a farmer, has lived in Delaware county thirty-two years and remembers Mr. Morley and his peculiarly constructed cow-pen, describes it, and recognized Fig. 2 in the Morley patent as representing it, and that there never was any barbed wire of any description on that cow-pen when he saw it. (Q.'s 32–35.)

Roderick Phelps (Rec., p. 168),

proprietor of the Central House, Edgewood, Clinton county, Iowa, lived in Delaware county from '61 to a few weeks ago. Knew Alvan Morley, states that he was "looney," and no doubt of it. Farmed part of the Morley land near Grommon's in '63 or '64. (Q.'s 1–8.) Witness remembers Mr. Morley's cow-pen, describes it, and thinks there was

no barbed wire about it or wire with sharp points upon it. (Q.'s 11, 12 and 13.)

Peter Jakelin (Rec., p. 187),

farmer; has lived in Delaware county for twenty-one years; remembers Mr. Morley's cow-pen; saw something which he was told was a calf-pasture or a cow-pen of Mr. Morley's. Thinks it was the spring of '66; built in about the shape of a flat-iron, with three wooden wheels on it. A horse kicked it all to pieces. Witness was all around it and in it, and states that there was no barbed wire about it of any description when he saw it. (Q.'s 27–30.)

James O. Ball (Rec., p. 191),

is a stock dealer; lived in Delaware county thirty-two years; was examined upon the Delhi fair fence, and remembers Mr. Morley's movable cow-pen, describes it, and recognizes the drawings of the Morley patent as representing it, and testifies that there was no barbed wire of any kind, or wire with sharp points upon it. (Q.'s 19–26.)

George W. Clapp (Rec., p. 237),

is the same witness before examined, in whose family Mr. Morley lived for several years, and states that in the latter part of '65 or '66 Mr. Morley had a movable cow-pen, which would travel in a circle; recognizes the patent as representing the pen, and testifies that there was no barbed wire, or wire with any kind of barbs or sharp points upon it, about that cow-pen. (Q.'s 34–38.)

Charles. T. White (Rec., p. 271),

lived in Delaware county since 1859; then knew a man by the name of Morley, who went by the name of "Crazy Morley." (Q.'s 28 and 29.) Witness testifies that he knew this peculiar movable cow-pen of Mr. Morley's; describes it and its location, as seen in 1864 and '5. Witness testifies that there was no barbed wire upon any part of it. (Q.'s 30–37.)

Jasper H. Hunt, (Rec., p. 367.)

a farmer, lived in Delaware County thirty-two years; knew old Mr. Morley, remembered his cow-pen and saw it probably not more than four or five times. Was pretty sure there was no barbed fence-wire with sharp points upon it.

George W. Long, (Rec., p. 373.)

the same witness who testified regarding the Delhi fair fence, remembers this cow-pen and describes it, Mr. Morley consulting him about taking out a patent upon it, the witness having no recollection of any wire of any kind entering into its construction. (Q.'s 14–23.)

Lyman L. Ayers (Rec., p. 221.)

is in a newspaper office at Des Moines, and has lived in Delaware County since 1861; was foreman of the Union newspaper at Manchester between '64 and '72; knew Alvan Morley; witness having with him the files of the paper from March, '65, to March, '67, producing such files and stating that he had made a search, and identifying all notices inserted by Alvan Morley between such dates regarding his inventions, such notices having been quoted above. (Q.'s 1–11.)

George Morley, (Rec., p. 796.)

the same witness who has before testified, lived at his father's house in Pennsylvania thirty-two or thirty-four years. His father described to him fully this traveling cow-pen. Drew it out on paper. Showed him how it would look in pencil. (Q. 27, 28, 29.) Never said anything about barbed fence-wire. (Q. 23.)

Freeman A. Lowell, (Rec., p. 480.)

a tinner and clerk in I. U. Butler's hardware store in Manchester, between 1865 and March, 1873. (Q's. 1 to 4.) Knew Alvin Morley, and made a model for a cow-pasture, as he called it, for him in 1866 or 1867. It was made of tin, three-cornered, with a wheel under each corner. He said he wanted

to send it to Washington. Witness states that Mr. Morley never stated nor intimated to him in any manner that he ever knew or had ever made any barb fence-wire, or knew anything about sharp points upon fence-wire. (Q's. 15 to 20.)

Ira P. Adams, (Rec., p. 488.)

a hardware merchant in Manchester since 1857. Was well acquainted with old Mr. Morley, who traded with him and often talked with him. Mr. Morley drew upon paper his traveling cow-pen, and described it to him, and during the years that he knew Alvin Morley, Morley never intimated in any manner that he knew anything about barbed wire or putting sharp points upon fence-wire. (Q's. 12–15.)

We shall leave this Morley movable cow-pen testimony with the firm conviction that the above depositions establish fully the fact that there was no barbed wire forming any part of that fence, irrespective of the absurdity of the assertion arising out of the construction, purpose and intended use of the pen itself.

Old Morley's North Farm East-Line Fence, and South-Line Road Fence.

It is asserted also in this record, upon the part of defendants, that Mr. Morley placed barbed wire upon the east line fence of his north farm, adjoining Ben Sheldon's, and upon his south line fence adjoining the road; that such fences were built of posts and crooked boards, except at two or three places extending over stony ground, at which points there were no posts or boards, but the entire space was bridged or fenced by three barb wires, and that this was done in the year 1859 or 1860.

Defendants called eleven witnesses to establish this fact, which is denied entirely by the complainants.

Morley Wire at Mill.

The defendants assert that Mr. Morley had an old saw mill on the banks of the Maquoketa, two or three miles below Manchester, for a few years after 1858 or 1859, and that he had barbed wire at that mill on a cow-yard or pasture fence, and had pieces of it in process of manufacture at the mill. Six witnesses are called by defendants to establish this fact, the first of whom is

H. L. Bates (Rec., p. 1321),

the same party who has testified regarding the existence of all the other Morley fences. Bates, in his direct examination, made no reference to any barbed wire at Mr. Morley's saw-mill, but in cross examination he states that the barbs which he put on the Morley fence at the Delhi fair were heated in a fire down in his mill. (C. Q. 85.) Bates states that he did not see the mill after he came to town, and he came to town in 1860. (C. Q. 169, 170.) And that he showed Morley how to heat the barbs to put on the wire at the mill. (C. Q. 301, 302.)

D. I. Johnston (Rec. p. 1372),

the same witness before testifying as to the Morley cow-pen and the north farm fence, states that he visited Mr. Morley at the mill and saw him putting on what he called "barbs" or "prickers," about 1859, and describes how he did it. (Qs. 9–24.) This witness goes on to describe the machines which Mr. Morley put his barb wire on with, and then states that he had some of this barbed wire on a calf-pen by the mill. (Qs. 26, 27.) The calf-pen was about twelve by twenty feet. (Q. 31.) The calf-pen was down by the saw-mill. (C. Q. 4.) Witness states that he never saw Morley twist spikes on wire except this one time. (C. Q. 51.)

Jonathan Luchinbill (Rec. p. 1445),

the same witness before testifying, states that he saw the same wire at this saw-mill that he saw at the fair. (Q. 17.) Thinks it was 1859 or 1860. (Q. 18.) That he saw it on a fence

right opposite the mill as far as across the road, and thinks it was made for a fence for a pasture for a couple of horses; might have been an acre or two acres; fence run right along the road on the pasture by the mill. (C. Q. 55–60.) In answer to C. Q. 61 the witness states that he did not look at the fence, and does not know how far it did run. He never was at the mill any other time. (C. Q. 72.) Witness does not know whether the pasture was on the same side of the river as the mill or not. (C. Q. 79.) And gives his testimony wholly from memory. (C. Q. 81.)

S. R. Young (Rec. p. 1453).

whose business is selling machinery, has resided in Delaware county for thirty years and knows both the Hoags. States that he knew the man who kept the mill on the Maquoketa river, known as old Morley. (Q.'s 4–6.) Got acquainted with him between 1858 and 1864. (Q. 8.) First saw wire with barbs or prickers on it down at his mill where he had some fixed up in shape to keep a cow in. (Q. 10.) Have seen him carry some of the wire around to show the neighbors. (Q. 12.) His wire at the mill with barbs on was around a patch of ground on some posts; probably it was a quarter of an acre, and may be more. (Q. 14.) Saw it a good many times. (Q. 15.) Saw Mr. Morley with pieces of barbed wire more than once. (Q. 20.) Saw this barbed wire at the mill between 1862 and 1864. (C. Q. 26.) Saw him carrying around and exhibiting pieces of barbed wire some time between 1862 and 1866. (Q. 27.)

Cross-Examination.

Have been selling wire for the defendants. (C. Q. 2.) Witness states that Morley's mill was off the road and out of the way, and if it was there in 1859 he did not go down to see it. (C. Q. 6.) Cow-pasture was two or three rods south-east of the mill. (C. Q. 19.) Two wires high. (C. Q. 21.) The wires were not at the top and not at the bottom. (C. Q. 24.) Might have been there a year and a half. (C. Q. 27.) Witness gives his deposition solely from memory. (C. Q. 45.)

Witness is selling no other wire except that of the defendants. (R. D. Q. 7.) And never sold any other. (R. D. Q. 8.)

Ichabod McDonald, (Rec., p. 1486.)

the same witness before testifying regarding the Morley wire, states that he saw barbed wire at the Morley saw-mill twenty-five years ago on a cow-yard, with a cow inside of it. It was quite a little yard for a cow—might have been one or two rods. "It was smooth wire, and it was twisted around it, and "stuck out perhaps three-fourths of an inch or less. Was "quite a pricker, I thought at the time. I was not much ac-"quainted with it." (Qs. 5–9.)

Cross-Examination.

Should think the cow-pen was eight or ten rods from the mill. (C. Q. 7.) "I don't think I saw it more than once." (C. Q. 8.)

M. Eldridge (Rec., p. 1855.)

lived in Delaware county thirty-two years, and knew a man by the name of Alvan Morley. Lived half a mile from him, more or less. (Qs. 1-5.) He built a dam and had a mill there. (Q. 6.) "I have seen him wire there on his yard where he "yarded his oxen and cow. Well, sir, I can't tell you what "was on the wire, though I know he had some kind of a wire "to turn stock. I didn't notice them. He used to be at my "place a good deal, and talked about making barbed wire to "turn stock." * * * "I think it was in 1859, either in "1858 or 1859." (Qs. 7 and 8.) "He was always talking "more or less about getting up barbed wire and other things "he was hatching up." (Q. 9.) * * * "I know there "was something on it to make it rough, to make it a sort of a "barbed wire, but I don't know as I can tell what it was." (Q. 10.)

Cross-Examination.

The cow-yard was right near his mill. "I can't say exactly, "but perhaps five or six rods, about the common-sized yard

" for four or five cows. I know it was not a very large one. " * * * Might have contained a quarter of an acre; don't " think that yard did more than that." (C. Q. 12 and 13.) No other cow in it except one. (C. Q. 16.) C. Qs. 25–30 show that the witness did not intend to swear positively about anything but the cow-pen; that he has known the elder Hoag for twenty or twenty-five years, and that the witness gave his testimony solely from memory. (C. Q. 23.)

A cursory review of the above testimony regarding the Morley wire at mill, shows that of the six defendants' witnesses, H. L. Bates is the old stand-by, who testifies as to all the Morley fences; that D. I. Johnston testifies as to an entirely different construction of calf-pen, from that recognized or referred to by any of the other witnesses. Jonathan Luchinbill locates the Morley barbed wire on a pasture fence right opposite the mill, one or two acres in extent, no other witnesses heretofore having referred to any such fence, and this witness never having been to the mill even, except that one time; S. R. Young is the agent of the above defendants, selling their wire exclusively, and testifies to the barbed wire on a patch of ground of about a quarter of an acre, at the mill, no other witness testifying to such enclosure; Ichabod McDonald testifies to a construction of cow-yard, near the mill, with barbed wire upon it, not then nor thereafter recognized by any other witness, himself seeing it but once; M. Eldridge testified in a hazy kind of a way, to seeing something on a wire near the mill, but could not tell what it was.

It would appear from the testimony of the above witnesses that they do not agree at all as to the size or description of structure upon which they profess to have seen barbed wire some thirty years ago near the mill; that they gave their depositions solely from memory, most of them having seen the device but once. It is probable that what these witnesses did see at the Morley mill was his traveling cow-pen, and their recollection is based solely upon an uncertain remembrance of a curious structure which they now transform into a barbed wire fence. Complainants deny the existence or presence of any

barbed wire fence of any description at this mill, and in addition to the testimony of the wife, sons and daughters of Mr. Morley, they called a number of parties who had an actual knowledge of the mill and its surroundings. The three principal witnesses are Mr. and Mrs. Clapp and their son, George W. Clapp, with whom Mr. Morley lived between February or March, 1861 and 1867, and who lived about a quarter of a mile from the mill.

COMPLAINANTS' WITNESSES IN REBUTTAL OF "OLD MORLEY WIRE AT MILL."

Mrs. Sarah A. Clapp, (Rec., p. 67),

testifies that between the spring of 1861 and the summer of 1867 he never made any barbed wire; she never saw any, and he never said anything about barbed wire or wire with sharp points upon it. (Qs. 231–3.)

Benjamin Clapp, (Rec., p. 75.)

worked at and was in the mill in 1861 and 1862; helped him cut logs. (Qs. 12, 13 and 14.) Mr. Clapp also undoubtedly built, or had built, the only fence that there was near the Morley mill, and which is undoubtedly the fence upon which one or two of the witnesses have seen fit to locate barbed wire. Mr. Clapp, referring to the years 1861 or 1862, says: "I helped him build a little fence right down by the mill. "He had a couple of acres broke, and fenced it with a board "fence. * * * Kindy a oblong piece. He only had to "fence it on three sides; the other jined Mrs. Peck's." (Qs. 15 and 16.) The witness stating that Mr. Morley never had any other fence there to his knowledge, and testifying that there was no barbed wire around the mill, or on any fence near the mill while he was around there, and he was familiar with it. (Qs. 32, 33.)

George W. Clapp (Rec., p. 237),

the son of the last two witnesses, and who worked part of the year for Mr. Morley in 1861, and who was around the mill, got

their firewood from it, and drew logs, lumber and posts from it, and worked at the mill, and was there a good deal in 1861 and 1862 (Qs. 9, 10 and 17) testifies that there was nothing around that mill that he did not know about. (Q. 18.) And testifies that there was no barbed wire of any kind around the mill. (Q. 37.) Mr. Morley never claimed that he knew anything about barbed wire, or wire with sharp points upon it (Q. 38.)

Charles H. Grommon (Rec., p. 88),

the same witness before testifying, and who lived adjoining Mr. Morley when he lived on his farm, and who was familiar with Mr. Morley's saw-mill, hauled logs from there, and helped him saw, and remembers a little fence somewhere about the mill, and states that he never saw any barbed wire around the mill, or any fence near it (Qs. 66–71), and that during the years he knew Mr. Morley he never stated or intimated to him that he knew anything about sharp points or barbs upon fence-wire of any description. (Q. 43.)

Dr. Albert Boomer (Rec., p. 159),

who has before testified, states that he attended Alvan Morley, either in 1858 or 1859, at his saw-mill; that he did not see at that time any barbed wire, or wire of any kind. (Qs. 9–25.) Does not remember of ever having any conversation with Mr. Morley concerning barbed wire. (Q. 28.)

Elijah P. Tubbs (Rec., p. 225),

the same witness before examined, knew of this Morley mill prior to his departure in 1861. He knew Mr. Morley was at his mill prior to 1861, and "I never saw any barbed wire there, "nor any wire fence of any kind. I never heard him say that "he had any." (Qs. 14–18.)

George Morley (Rec., p. 796),

Son of Mr. Morley. Visited his father at the mill between 1858 and 1860. Was there about three weeks, and was familiar

with the mill and its immediate surroundings at that time. (Qs. 9–16.) Witness knows what barbed fence-wire is; examined the Delhi Fair Wire Exhibit. Saw nothing of that kind about the mill, or barbed wire of any description, and his father never claimed to have gotten up or knew anything about barbed fence-wire or about points on fence-wire, although he talked freely and fully with him about all his matters. (Qs. 20–24.)

It would appear that the testimony of all of the above witnesses who knew Alvan Morley, his acts, doings and surroundings, and who are the highest authority as to such matters, makes it certain that the depositions of the six defendants' witnesses are vagaries of recollection, entirely inconsistent with the actual facts.

UNRELIABILITY OF TESTIMONY REGARDING THE EXISTENCE AND CONSTRUCTION OF A MECHANICAL DEVICE, GIVEN ONLY FROM MEMORY AFTER LONG LAPSE OF TIME.

There is a long line of cases, beginning at a very early period, and following each other in unbroken and rapid succession down to the present time, which condemn and ignore the attempts to defeat valuable patented devices by the testimony of witnesses as to the existence of alleged antecedent structures of a long prior date, such depositions being given from memory solely. In the long array of defendant's witnesses regarding these various Morley fences, with the exception of the deposition of the single witness, Steve Potter, who produced an alleged piece of the original Morley wire, all the testimony of defendant's witnesses is given solely from memory. We desire to call the attention of the court to some of the decisions where such testimony has been relied upon to defeat a valuable invention and passed upon by the court.

In the case of *Ely* v. *Monson*, 4 Fisher, p. 79, the court, commenting upon this class of testimony, states: "I mean to "say that where the recollection of a witness who, after a "lapse of twenty-one years, is called to state that he has seen

"or used a certain machine, and then undertakes to describe "it from memory, without stating that he has had anything "to refresh his memory during that time, producing no "model or drawing—I think it would be extremely hazardous "upon such a recollection to undertake to say that that machine "was like the plaintiff's. There are so many errors to which a "man honestly is liable that I think it would be extremely "hazardous."

In the case of *Wood* v. *Cleveland Rolling Mill Co.*, 4 Fisher, p. 559, where an attack was made upon a valuable invention by *prior use* witnesses after the same fashion as now present in defendant's record, Mr. Chief Justice SWAYNE, in passing upon such evidence in that case, stated: "The confidence of "the attacking witnesses is often in proportion to the distance "of time that one is removed from the other. Their imagina- "tions are wrought upon by the influence to which their 'minds are subjected and beguiles their memory."

In the case of *Adams & Westlake Mfg. Co.* v. *Rathbone*, 26 Fed. Rep., 262, the court, referring to this same class of testimony, uses the following language: "Proof as to the use of "alleged prior devices, resting wholly in the recollection "of persons who claim to have seen or used them twenty "years before, and where none of such devices are produced, "is too unreliable to form a safe basis for judicial action."

In the case of *Smith* v. *Fay*, 4 Fisher, 451, the court, in commenting upon that class of testimony as the *prior use* performances appearing in defendant's record, states: "But "we find no such evidence or approach to such evidence on "the mere point of time as after twenty years uninterrupted "use of a valuable invention would be supposed to antedate "it. The danger of such proof generally must be considered. "* * * * The presumption arising from silence, where "there is so much interest and occasion to assert it, and the "party intelligent and the results certain, if the facts warrant "it has far more strength than any preponderance in the "number of witnesses and literal statements by them in this "case," the court stating that "the statute of limitations "furnishes the philosophy for disposing of such a case."

A very large number of the defendants' witnesses, in describing this old Morley wire at the different places, were persistent in using the expressions "to the best "of my knowledge," and "as near as I can recollect." All of these witnesses are, in one sense, interested witnesses in this, that they are old friends of the defendants, and by education and association hostile to the complainants and to any form of patent monopoly, as they term it. The value of the testimony of such witnesses is well stated in the case of *Irish* v. *Knapp*, 18 O. G., 736, where the Court says that where an interested witness uses the expressions "to the best "of his knowledge," and "as near as he could recollect," "these expressions show that he had no certain recollection "about it."

It will be remembered that, comparing the numerous depositions of the defendants' witnesses, one with the other, as to these Morley fences, they did not agree at all as to the construction of these fences.

In the case of *McKesson* v. *Carnick*, the Court practically held that the memory of witnesses who do not agree is not sufficient to defeat a patent, the Court stating: "No original ap- "paratus is produced. The matter is one of recollection after "the lapse of many years. The witnesses do not agree, and "there is great doubt and obscurity."

We most respectfully submit that the testimony of defendants regarding the origin, existence and use of these different old Morley fences may well come under the criticism and condemnation expressed in the above line of decisions, and the true status of this testimony and this alleged fence is well stated in the language of Judge Brewer, namely, "Can you rely on "the recollection of witnesses reaching back over twenty-five "years as to the particular form in which a fence, seen but "for a day or two, was constructed? It would be strange if "that recollection was so clear and distinct as to the manner "in which those wires were barbed or protected by prick- "ers, that the Court would be justified in relying very much "thereon."

We desire before conclusion of this discussion as to these old

Morley fences, to suggest that it would be curious, indeed, if old Mr. Morley, who had a saw-mill and timber surrounding it of his own, should have turned his attention to any other mode or manner of fencing his land than by the production and use of his own material for that purpose from his mill. We desire, also, in this connection, to invoke the well settled rule of law to the effect that *the defendants must prove an alleged existence of "prior use" beyond reasonable doubt.* The following authorities make this certain :

"To doubt is to solve questions of prior use in the negative."

Hawes v. *Antisdel*, 8 O. G., 685.

Walker on Patents, under paragraph 76, page 60, well states this doctrine as follows : "The burden of proof as to want of "novelty, rests upon him who avers it, and every reasonable "doubt owed be resolved against him. It follows from this "declaration of the Supreme Court and has been expressly "decided by several Circuit Courts that novelty can only "be negatived by proof which puts the fact beyond a rea-"sonable doubt. Under this rule, a patent enjoys the same "presumption of novelty that an unconvicted prisoner does of "innocence."

The United States supreme authorities referred to by Mr. Walker are :

Coffin v. Ogden, 18 Wallace, 120.
Parham v. Machine Company, 4 Fisher, 382.
Webster Loom Company, v. Higgins, 4 Bann. & Ard., 88.
Shirley v. Sanderson, 8 Fed. Rep., 908.
Green v. French, 11 Fed. Rep., 591.

Mr. Walker going on to state the principal reason for this rule, namely : "In patent cases, on the other hand, the "alleged facts relied upon by defendants to show want of nov-"elty are nearly always wholly outside of the knowledge of "the plaintiffs. These allegations may readily be without any

" foundation, and the plaintiffs be wholly ignorant of that " fact. It is easy for a few bad men or mistaken men to testify " that at some remote or unfrequented place they used or knew " a thing substantially like the thing covered by the patent, " and did so before that thing was invented by the patentee."

It will probably be urged by the defendants that a considerable portion of the testimony presented in rebuttal, and in contradiction of these old Morley and other alleged prior use fences, is in the nature of negative testimony ; that it is testimony of parties who saw and were familiar with these fences, are facts, but who never saw or knew of any barbed wire. The value of such testimony and its general acceptation by the courts, to throw doubt upon positive assertions relating to anticipatory devices, is also well stated by Mr. Walker, page 51 : " In such a case it may happen that the plaintiff can produce " nothing but negative testimony in reply ; testimony of per- " sons who were conversant with the place in question, at the " time in question, and did not see or know the thing alleged " to have been there at that time. If mere preponderance of " evidence were to control the issue, the affirmative testimony " of a few witnesses, that they did see or know or use a partic- " ular thing at a particular time and place, would outweigh " the negative testimony of many persons, that they were at " or near that place at that time, and did not see or know or " use any such thing. But such negative testimony may cast a " reasonable doubt upon such affirmative evidence, and if it is " strong enough for that purpose it will render the latter un- " availing," the authorities cited in support of this position being :

Sales *v.* Railway Co., 4 Fisher, 588.
Washburn & Moen Mfg. Co., *v.* Haish, 4 Fed. Rep., 900.
Green *v.* French, 11 Fed. Rep., 591.

These principles are recognized in many cases at the circuit in various forms of expressions :

" When, in a patent infringement cause, the defence relied " on, is that the plaintiff was not the original inventor, the

" burden of the proof is on the defendant to satisfy the Court " on that point beyond a reasonable doubt."

Worswick *v.* City of Buffalo, 20 Fed. Rep., 126.
Putnam *v.* Hollander, 6 Fed. Rep., 882.

" The burden of proof is on the defendant to satisfy the " Court beyond a reasonable doubt that the defence of prior " knowledge and use has been established."

Dreyfus *v.* Schneider, 25 Federal Rep., 481.

" In order to defeat a patent on the ground of prior use, " such use must be established beyond a reasonable doubt."

Wetherell *v.* Keith, 17 Fed. Rep., 364.
Am. Bell Tel. Co. *v.* Peoples' Tel. Co., 25 Fed. Rep., 725.
Cohansey *v.* Wharton, 28 Fed. Rep., 189.

Now, in conclusion, we have one more suggestion to make as to these old Morley fences. We do not believe that a case can be found, reported or otherwise, where a patented invention was defeated by the vagaries and insane speculations and delusions of a lunatic or crank, and that even if your Honor should believe that something of the kind, in the shape of points upon fence-wires, might have been conceived and executed by Mr. Morley, your Honor will relegate such attempts and expressions of lunacy to the category of abandoned experiments, which, metaphorically speaking, is a junk-shop of considerable magnitude, where is stored in the decisions a vast number of attempts of this character. Certain it is that no results ever came from any attempt of " Crazy Morley ; " no farmer or other person ever followed any of his conceptions, and no record proof of any kind exists to determine their character or extent.

There is not the slightest proof in this record that any of the asserted " old Morley fences " was practical or successful, or performed any useful or beneficial purpose whatever.

" It is only when some person, by labor and perseverance, " has been successful in perfecting some valuable manufacture,

"by ingenious improvements, and labor-saving devices, that "their patents are sought to be annulled by digging up some "useless, rusty, forgotten contrivances of unsuccessful experi- "menters."

Adams *v.* Jones, 1 Fisher, 531.

"How invariable is it that after a great invention has been "brought before the world, has become known to the public, "and been put in form to be useful, that people start up in "various places and declare that they invented the same thing "long before. The cotton gin and the ether discovery are "illustrations in point; and others of similar character might "be added, indefinitely. These pretended prior inventors had "thought of such a thing, perhaps; but they had never carried "it to the extent of making it of practical utility, so that the "world could obtain possession of it. But when they find "that another has completed that which they had begun, they "are astonished that they did not see—think they must have "seen all that is necessary—and claim that they have invent- "ed it. After having seen what has been done, the mind is "very apt to blend the subsequent information with prior "recollection, and confuse them together. Prophecy after the "event is easy prophecy. I think that this is one of the cases "in which several of the witnesses have been led to the illusion "of believing that they knew before what they have learned "or been taught."

Howe *v.* Underwood, 1 Fisher, p. 175.

W. H. Long Fence.

It is alleged by the defendants that in the summer of 1873, W. H. Long, residing in Delaware county, and but a few miles from Manchester, put barbs or staples upon a plain wire forming a part of his fence, the particular fence upon which he put the barbs being a feed-yard or lot in the north-west corner of a forty opposite his house. The application of the Glidden Patent in suit being in October, 1873. It is not denied by the complainants that Mr. Long built this feed-lot and barbed his

plain wire thereon, as he describes, but it is asserted that no such action was taken upon his part until more than a year after the date fixed by him.

W. H. Long, (Rec., p. 1569),

tells his story as follows: "Is a farmer; fifty-two years old; "lived in Delaware county thirty-one years. Is acquainted "with the elder Hoag and his farm is two miles north of "Delaware Center." (Q's 1–4.)

Regarding putting barbs upon wire he states: "I have "built such a fence. The first was in the summer of 1873. "It was on the forty in front of the house. * * * I can't "tell how much I put on. I put on other on other places. I can't tell how much I put on that forty. *I made a feed-yard on "that forty made of two barbed wires. Was made in the north-"west corner of the forty. I have a board fence along the rail-"road on the west of the forty.* I put smooth wire on first and "put barbs on afterwards. The two wires around the feed-"yard was the same then, also on the south side was a "smooth wire with some barbs on it. There was some places "on the west fence I did not put the barbs on that summer. I "couldn't tell exactly what time I commenced, but commenced "before harvest or haying." (Q's 5–6.) * * *

And in answer to interrogatory who put the barbs on the wire fence he says: "I put on some of them. Mr. Albert "Billings put on some. A. D. Long, my son, put on some, I "think. I think that was all except one or two who came "along the road and put on a few." (Q. 8.) Albert Billings worked for me then. (Q. 9.) The witness then states the manner in which he put the barbs on the wire, namely: "It "was a two pointed barb, made out of a common staple. I "had two irons made with a hole in the end of them like a "lead pencil with the lead out. I put the staple over the "wire, then took the two irons and put one on each point of "the staple and drew them in opposite directions around the "wire. Then I took a hammer and an old flat-iron and put "the wire under and I struck it with the hammer. (Q. 10.) "Think I commenced the last of May or the first or June." (Q. 20.)

Cross-Examination.

"Bought the staples for the purpose of fastening wire to the "posts and putting on the barbs." (C. Q. 4). Witness could not tell how many pounds of staples he bought for the purpose of barbing this fence, but states: "I can't tell. I remember "of buying a keg. Don't know whether just at this time or "not. (C. Q. 5.) Can't tell whether I bought the keg of "staples the summer I put on these barb wires or afterwards. "(C. Q. 21–22.) The feed-yard on the 40 in front of the house "was about one and one-half acres. *Was made soon after the "hay was taken off in 1873.* (C. Q. 53.) *Never was any feed-"yard in that particular place until 1873.* (C. Q. 55, 56.) The "feed-yard was in the north west corner and one side fronted "on the road with a pine board fence. (C. Q. 57–61.) Ex-"tended about twenty rods. (C. Q. 63.) I built this par-"ticular fence in the spring of 1873. A. D. Long and Albert "Billings helped me. (C. Q. 64.) Bought the boards in Du-"buque, I think. (C. Q. 65.) Couldn't say of whom. (C. "Q. 66.) Bought the boards the latter part of the winter of "1873. (C. Q. 67.) The fence on the west side of the feed-"yard was a portable fence, made of pine lumber. (C. Q. 72.) "Built the portable fence in the spring of '73. (C. Q. 74.) "Put smooth wire on top of it. (C. Q. 76.) I put barbs on "the smooth wire of this portable fence or had it done." (C. Q. 85.) Witness then describes this portable fence. (C. Q. 97) and states that the fence forming the south *side of the feed-lot was a wire fence. Two wires.* (C. Q. 98.) *Put barbs on both wires.* (C. Q. 104.) *The fence on the east side of the feed-lot the same as on the south side.* (C. Q. 100.)

The testimony of this witness from C. Qs. 144–155 shows that the witness has no distinct recollection as to the dates when he barbed his plain wire fences and the C. Qs. 156–162 show that he has no reliable memorandum to fix any date for barbing his fence wire, the witness evidently fixing his dates from the statements of other parties to him as appears by his answer to C. Q. 163: "*I mean to say that other parties looked*

"*up these circumstances connected with what I know, so that I* "*could tell what the dates were in regard to this particular thing* "*and these irons.*")

Witness cannot tell when the board fence upon which the wire was placed was moved or who moved it. (C. Q. 217, 218.)

"I barbed the feed-lot because I had stock in the pasture. "I put the barbs on that fence to keep them apart." (C. Q. 233.) In answer to C. Q. 243 witness attempted to make a statement which is of considerable length, and which strongly gives the impression that he has no reliable recollection either as to dates or the construction of the fence. In answer to C. Q. 318 witness states that Mr. Moore made the irons upon which he put the barbs, and that he was then a blacksmith in Delaware Center. Witness, in answer to R. D. Q. 1, produced a sample of barbed fence-wire, which he says came off the west fence. (R. D. Q. 6.) In answer to R. D. Q. 17, he admits that some of the barbs of that wire had been put on with pinchers.

The deposition of this witness is exceedingly lengthy, and we most respectfully urge that if the court will read this deposition throughout its entirety, the conclusion will be irresistible that the witness has no reliable recollection as to the dates and happenings of the acts and events which he narrates. The deposition is full of instances where the witness fails to remember the dates of happening of events of much more importance than twisting a few staples upon fence-wire. And this fact can only be appreciated by taking the time to read the entire deposition.

A. D. Long, (Rec., p. 850,)

is now twenty-eight years of age, and is a son of the last witness. (Q's 1 to 3.) He states, regarding putting barbs upon wire that "It was put on a pasture fence on a forty south of "the house, on about. The first was, I think, on about sixty "rods, the last of May or first of June, 1873. (Q. 4.) It "was in the spring after father bought that eighty of land "adjoining the old farm on the west. He also bought a

"harvester that spring or summer." (Q. 7.) The witness then recognizes a deed of date of July 5, 1872, and says that barbs were put on the next May or June after that deed. (Q. 9, 10.)

Cross-Examination.

Witness states that these barbs were put on a feed-yard fence in the north-west corner of the pasture, and there "was "some of the wire on the west side of the pasture." (C. Q. 6.) "Cattle and horses were pastured in the pasture the first season "that barbs were on. (C. Q. 1.) Think the railroad was there "several years prior to putting the barbs on that fence. (C. "Q. 12–16.) The witness was then fifteen years old. (C. Q "18.) Put barbs on with pinchers that had marks on 'patent "applied for.' Borrowed them from Mr. Kingsley." (C. Q. 51, 52.)

Witness then testifies that before they put these barbs upon wires, "Mr. Richmond, near Earlville, had some "narrow strips of lumber with sharp spikes through them "attached to some smooth wires before this. Was all I be- "lieve I heard of." (C. Q. 55–58.)

The witness then describes the feed-lot and states that the barbs were *put on the summer the pasture fence was built in 1873* (C. Q. 64, 65); and that in the season of 1873 the crops on the pasture lot were rye and oats, and the next year they sowed it with timothy and made hay of it. (C. Q. 66, 67.)

A reading of this long deposition also shows that the memory of this witness is exceedingly unreliable as to the dates of the happenings of events, and the witness gives no reliable data from which to fix the date of the first putting the barbs upon the wire.

Albert Billings, (Rec., p. 867.)

is a cooper, resides at Manchester, and commenced to work for Long in the spring of 1873. (Qs. 1–5.) While there in 1873, helped Mr. Long, and in 1873 knew that Mr. Long had a board fence with barbed wire on top of it. It was built right along the east side of the railroad. Mr. Long helped build it, and I

think his son. No person else. (Qs. 8, 9.) The barbs were put on the wire on top of the fence (Q. 12, 13), probably fifty or sixty rods. On the west side of the forty-acre lot opposite the house. (Q. 16–19.) Think the barbs were put on before harvest. (Q. 21.) It was before July. (Q. 28.) Defendants' Exhibit C looks like the wire. (Q. 29.) The barbs were put on the thickest at the north end. "*He calculated to build* "*a yard up there for his cattle.*" (Q. 33.)

Cross-Examination.

"In the spring of 1873 the forty in front of the house that "had this fence was pretty much all plowed up, I think, and "sowed with oats." (C. Q. 31, 32, 33.) The oats was taken off in August, the corn later. Plowed it again for oats. (C. Q. 36.) "Worked the next spring for Mr. Taft until June; "then went back to Mr. Long's. (C. Q. 46, 47.) There was "oats on that forty in 1874. Think the whole forty was in oats "in 1874. Don't know how many barbs were put on the "wire. (C. Q. 57.) Barbs were put on to keep the cattle in "the forty-acre lot. (C. Q. 107.) But there was no cattle in "the forty-acre lot after the barbs were on." (C. Q. 108.) "The witness then states that the boards out of which the fence "was made were piled up in the yard east of the house. That they were new boards, and thinks they came from Dubuque. (C. Q. 147–150.) The witness stating further: "There was a "*car-load of boards there in the yard.*" "There was no feed-"yard in that forty until 1874." (R. D. Q. 6 to 12.) The witness contradicts the Long's fairly and squarely in the statement that there was a feed-yard in the forty opposite the house in 1873. The two Longs, W. H. and son, testified that these barbs were first put on that feed-lot on the west, south and east fences. Of course, if the feed-lot was not there until 1874 it could not have been barbed. We also call the attention of the court to the identification of the fact by this witness of there being a car-load of lumber, new boards, in the yard of W. H. Long, of which this fence was built, that was alleged to be barbed, as this fact will hereafter be a deciding factor in ascertaining the date of the building of that fence.

George Long (Rec., p. 998.)

is a brother of W. H. Long; is a farmer; lived in Delaware county thirty years. (Qs. 1–5.) The witness states: "I "have a recollection of his putting some barbs on a smooth "wire near the railroad track; it was in the summer season "of the year, in warm weather. I AM UNABLE TO FIX IN MY "MIND THE YEAR IN WHICH IT OCCURRED. (Qs. 7, 8.) Cannot "fix positively by any event which transpired in the neighbor- "hood. (Q. 9.) My memory is too poor on dates to give a "statement as to the date." (Q. 10.)

Cross-Examination

Witness is inclined to think he first saw his brother putting on barbs on this forty-acre lot on Sunday, but does not think their feed-lot fence was built that Sunday. (C. Q. 16.) Witness states that he does not know whether he had heard of pinchers at the time he saw his brother put these barbs on the feed-yard fence, witness stating: "It is impossible for me to "tell. I cannot remember. *Those events seem all near to-* "*gether to me now, for some reason.* (C. Q. 36.) Saw Rich- "mond strip fence about the time that brother barbed his "fence, as stated." (C. Q. 71–76.)

The deposition of this witness is worthless as establishing any date as early as 1873 for the putting of those barbs upon the wire by his brother, W. H. Long.

Joseph Long, (Rec., p. 1019.)

next called to support this fence, is the father of A. D. and George Long, and the grandfather of W. H., whose testimony has above been given; has lived in Delaware county since 1854. This witness states that he saw his son putting on barbs, and describes how he put them on. (Qs. 7, 8.) Witness states that he cannot *tell the year nor the season of the year*, except he thinks it was warm weather, without a doubt. (Q. 12.)

Cross-Examination.

Witness does not know whether there was a feed-lot fenced

off when he saw his son putting on the barbs or not. (C. Q. 21, 22.)

Evidently the deposition of this witness is worthless to establish any date of the alleged happening event.

Ezra Coates (Rec., p. 1010.)

is a farmer; lived in Delaware county since 1854; is acquainted with W. H. Long; known him for twenty-five years; lives a mile and a half from him. (Q.'s 1–4.) As to there being barbed wire on the Long farm, the witness states: "I have seen "barbed wire fence in the county; Mr. Long barbed the first "fence that I saw near the railroad; AS NEAR AS I CAN RECOL-"LECT, IT WAS IN THE SPRING AFTER PITKIN WENT AWAY. (Q. 5.) "I think Pitkin went away in the fall of 1872." (Q. 13.)

The cross-examination shows that he only thinks he saw Long putting the barbs on the year after Pitkin moved away; can't say how he knew it; cannot give any reasons how he knows Pitkin moved away in the spring of 1872. (C. Q. 81, 82–86.)

Witness heard of the Kennedy barb as long ago as 1870, it seems to him, and thinks he heard of the Kennedy barb, and saw Kennedy barb before he saw Long put on his barbs. (C. Q. 97, 98.) It is quite apparent that the witness has no reliable recollection of dates, and that he himself is well aware of the fact.

George E. Blaisdell, (Rec., p. 883),

lives in Manchester, and has been a farmer, but has quit it; knows W. H. Long; lived about a mile and a half of him in 1873. (Q. 4.) Saw him at work at a barbed wire fence in 1873. "Part board and part wire. (Q. 5.) I saw him at a distance; "was not close to them; it was in the latter part or fore part "of the summer of 1873. (Q. 7, 8.) Examined the barbs; "they looked like staples twisted around wire. (Q. 9.) It "was on the forty south of his house and east of the railroad; "on the west and north sides that he had barbs on. (Q. 10, 11, "12.) There was a feed-yard there; first saw it the latter

" part of the summer or the first of the fall. (Q. 20, 21.)
" From one to two acres. (Q. 22.)
" Q. 24. How do you know that it was in 1873 that you
" saw the barbed wire there?

" A. It was the NEXT SPRING AFTER MR. PITKIN MOVED AWAY.
" HE MOVED AWAY IN THE FALL OF 1872. IT WAS THE SAME
" SUMMER THAT ALBERT BILLINGS WORKED FOR MR. LONG."

The witness then narrates the sickness of his wife and the birth of his child as a reason for remembering the date of Mr. Long's putting barbs upon his fences, but gives no association or relation between the two events. Witness lived on the farm half a mile from Mr. Long for a number of years after 1873. (C. Q. 5, 6.) Witness states that he first recollected these fences after they were built " some time this winter or spring," and Mr. Hoag first spoke to him about it, and that at first he did not know anything about it. (C. Q. 156–158.) The farcical character of this witness' recollection is clearly illustrated by the following question and answer:

(R. D. Q. 1 and 2.) " How then did you ascertain after
" Mr. Hoag spoke about it, when this fence was built? A. I
" went home and asked my wife if there was any way which
" she could remember the time that the railroad was built, or
" the time that Mr. Pitkin moved away. She said that the
" railroad was built the same summer that our youngest child
" was born and that Pitkin moved away in the fall. * * *
" After telling me that, I could recollect the time as well as
" she could. I then referred to the record of my youngest
" child's birth."

A reading of this witness' cross-examination shows that his memory is perfectly unreliable not only as to dates but as to events.

T. N. Sedgwick, (Rec. p. 1359),

Is a farmer. Resides in Delaware county, and knows the defendants, and has lived in the county seventeen or eighteen years. (Q. 1 to 4.) Knows Mr. Long and lived about three

and one-half miles from him in 1872. "*State if about the year "1873 you saw any wire fence on Mr. H. W. Long's place?* "A. I did. * * * Saw one strand. It was on the forty "south of the house. Well, I called it fenced staples on wires. "(Q. 10.) I couldn't say how long the strand was. It was "fastened on top to the posts or boards near the top. Three or "four boards under the wire. (Q. 12–13.) Saw wire on top "of the fence near the north end. (Q. 17.) The fence was on "the east side of the railroad track. Couldn't say how near. "(Q. 20.) It was about the first of July, 1873, that I saw those "barbs."

Witness swears that he don't recollect of seeing this barbed wire at Long's more than once. This witness states that he was driving around the country with a load of hogs when he saw this barbed wire, and C. Q.'s 13 to 46 show that he has no definite recollection at all as to trip or any of the events connected therewith. The witness testifies positively that there was no wire on the road by this long fence (C. Q. 57), and cannot explain what possible connection there is between his having hogs to sell and the first time he saw a board and wire fence on the Long farm. (C. Q. 67.) He cannot describe what the field was used for that he saw the wire fence on, or whether the fence was around a feed-lot. (C. Q.s 83 to 85.) And gives his deposition solely from memory. (C. Q. 98.) "The fence might have been three or four years old that "I saw." (C. Q. 108.) Witness refuses to answer whether or not he has been the defendant in a prosecution founded upon a criminal charge in the community. (C. Q. 114.) Witness testified that the barbs he saw on the Long fence were apart, "some were a foot, and some were four feet or three "feet. I should judge they were not on uniform at all." (C. Q. 127.)

James Clugston, (Rec., p. 1393),

is a farmer. Lived in Delaware county thirty years. Saw barbed wire on Henry Long's fence about 1872 or 1873. As NEAR AS I CAN REMEMBER. (Q. 23, 24.) It was on a lot across

from the house on a yard. It was "not a very large yard "and was probably a yard used for cattle. (Q. 25-6.) Should "think the barbs were fence staples twisted around the wire. "(Q. 27.) On the south and east fences. (Q. 28.) Lived "about five and one-half miles from Henry Long's. If I re- "member right, there was a barbed wire on top of the railroad "fence. (C. Q. 9.) Don't know what kind of a fence on the "west side of the lot. (C. Q. 12.) Don't think the railroad "was built when I saw the Long lot fence. (C. Q. 21.) Can- "not remember when the railroad was built, and could only "guess in three or four years of time. (C. Q. 23, 24, 25.) "Was hunting a stray colt at the time I saw the fence. Don't "think there was any railroad across the Long farm at that "time. (C. Q. 28, 29.) Cannot even guess at the time the "railroad was built. (C. Q. 30.) Don't recollect of seeing "the fence more than once in particular. (C. Q. 49.) Couldn't "say there was a school-house on the forty when I saw the "fence. (C. Q. 54.) Looked at the fence from three to five "times, as near as I can remember. (C. Q. 83.) Have not "given my deposition from any books, papers, or memoranda "of any description. (C. Q. 92-94.)

It seems entirely evident that this witness has no recollection of any date when he saw the barbed wire on the Long farm, and is simply guessing at it, and that he does not recollect correctly the location of the fences, or the manner of their construction, and does not even know when the railroad was built, where it was built at that time, and cannot even guess at it.

Complainant's Witnesses in Rebuttal of Long Fence.

Complainants would have been entirely justified in resting on the uncontradicted statements of the above witnesses with the assurance that no definite date had been assigned by such witnesses as fixing the date of the placing of the barbs by Long on his feed-yard fence, but they did not so rest, but on the contrary, made it certain by positive proof, that Long not only put no barbs on his feed-

yard fence in the year 1873 ; but further, that he had no feed-yard fence there in that year to put barbs upon, nor for two years thereafter. To substantiate these facts, complainants called, first

George C. Patterson (Rec., p. 145),

who is a farmer, and lives in Buena Vista County, Iowa, and he lived in Delaware County for eight years prior to 1876, and lived on a farm adjoining Mr. W. H. Long. (Qs 1–6.) Mr. Patterson says that he knows where and how Mr. Long first put barbs on his fence wire—where on his farm and how (Qs. 15, 16), and that it was in the year 1874, on the top wire on his south 80, and that before he sold his farm in November, 1875, Mr. Long had not put any barbed fence-wire on the road board fence across from his house. (Qs. 19–24.) If Mr. Long has sworn that he built a yard to feed cattle in the northwest quarter of the 40 several years before I left, he must have sworn falsely. (C. Q. 65, 66.)

George Haguewood (Rec., p. 255.)

Thirty-five years old ; a carpenter and now residing in Ida Grove, Ida County, Iowa ; lived in Delaware County from the spring of 1869 to the fall of 1871, and from June, 1873, until 1877 or 1878. (Qs. 1–3.) Mr. Haguewood knew Mr. W. H. Long ; knew of his farm, and worked on his farm from March, 1874, to about the last of July, 1874. (Qs. 3, 4–9.) Mr. Haguewood built the fence around Mr. Long's garden, and around his house at that time, and describes it. Also describes the fence on the 40 opposite the house, and Mr. Haguewood testified positively that in 1874 there was no fence of any description along the railroad running through the Long farm ; that the land opposite the house, east of the railroad, that year was used for farming, and that there was no cow pasture along the road across from the house in 1874. Mr. Haguewood also testifies that he is familiar with barbed wire, and that while he was there in 1874, there was no barbed wire on the fence across the road from the house on that Long farm. Mr. Haguewood states that in 1874 the

fence along the road opposite the house was a kind of a patched-up fence, with boards and rails. (Q. 20.) And it was not until 1876 that he saw a post and board fence at that place. (Compts. Rec., 174–5.)

The long cross-examination of this witness shows that he had a clear and distinct recollection of all his dates, and he has had no opportunity for becoming confused as to these dates by any after working or familiarity with this Long farm.

Charles F. White (Rec., p. 271),

lives in Delaware, Delaware County. Has lived there since the fall of 1859, and have known Mr. W. H. Long since 1864. Knows where his farm is situated, and states that in the years 1872, 1873 and 1874, he occupied a farm adjoining Mr. Long's on the north, and that he lived on this farm in 1872 and 1873, and up to March, 1874. (Qs. 9 to 12.) Mr. White states that up to the time he left, in March, 1874, the fence along the road opposite the Long house was a rail fence. "East of the house it was posts and rails, posts set in "the ground; west of the house a leaning fence, as we called" it." (Q. 14 and 15.) Mr. White testifies positively that this post and board fence opposite the house was changed some time during the summer of 1875. (Qs. 18 and 19.) And up to the time he left his adjoining farm, in the spring of 1874, no change had been made in that fence. Witness testifies that during the year 1873 there was no cow-yard in the forty across the road from the Long house (Q. 22); but that there was a cow-yard built there after the year 1874. (Q. 23, 24.) Mr. White testified that he had pinchers in 1875 to pinch on barbs on wires, and W. H. Long borrowed them. (Q. 27.)

George W. Hunt, (Rec., p. 285),

A mechanic; lives at Delaware, Delaware county. Born there, and lived in the village of Delaware in 1873, 1874, 1875 and 1876. Knew W. H. Long; where his farm was situated during those years. This witness testifies that during the

years 1873, 1874, 1875 and 1876 he was familiar with the roads on each side of the fence running through the Long farm, and describes them (Qs. 7, 8), and fixes the fact from the date of his frequent visits to his sister along that road, and that his sister died in June, 1876. (Q. 12.) Witness testifies that Long had boards shipped from Dubuque, by the Illinois Central railroad; that in the spring of 1876 he saw him building a fence with these boards opposite his house. (Qs. 13, 14, 15.)

Cross-Examination.

Witness testified that in 1876 Long put a barbed wire on this board fence. (C. Q. 16.)

Jeremiah E. Shade, (Rec., p. 291),

Is a merchant. Lives at Rock Rapids, Lyon county. Lived in Delaware county fifteen years, and left there in 1874. Knows W. H. Long, and where his farm was situated in 1873 and 1874. (Q. 1 to 5.) "Lived on my father's farm "up to October, 1873. About a mile and a quarter "from the W. H. Long farm. (Q. 8.) Was familiar with 'the east and west road through the W. H. Long "farm from 1873 until May, 1874, and describes the fence." (Q. 9.) Witness then states that in 1873 up to 1874 there was no post and board fence on the south side of the road through the Long farm between the school-house and the railroad. (Q. 11.) And no fence on either side of the railroad. Probably traveled the road once a week during the winter. (Q. 17.) Testifies that during the year 1873 there was no cow-pen or cow-yard fenced off along the road in the field opposite Long's house. That he has lived in Lyons county, Iowa, ever since May, 1874. (Q. 18, 19.)

The long cross-examination of this witness simply demonstrated the accuracy of his recollection and his qualification for giving his deposition.

John H. Webb, (Rec., p. 303),

Farmer. Now living in Lyons county, Iowa. Lived in Delaware county about twenty-five years and left there in the

spring of 1875 for Dakota. (Qs. 1 to 5.) His father's farm prior to 1876 was near the farm of W. H. Long. (Qs. 7, 8.) Witness knew the fences on each side of the east and west road through the Long farm in 1873 and 1874 and describes them. (Q. 11.) And states that in 1875 or 1876 a board fence was built along the south side of the road, and that in 1873 there was no fence on either side of the railroad through the Long farm. (Qs. 11, 12.) During 1873, 1874 and 1875 was along the road some weeks four or five times, and that during every one of those years he visited the Longs, lots of times, and threshed for them during each of those years. (Qs. 15, 16, 17.) Witness testifies that in 1873 and 1874 he never saw any cow pen or cow-pasture adjoining the road in the field opposite the Long farm. (Q. 18.)

Charles Moore. (Rec., p. 309.)

Resides at Colorado, and is a ranchman; raising cattle. Lived in Delaware county from 1870 to 1880. (Qs. 1 to 3.) Knew W. H. Long. Witness has shown or described to him the tools which Mr. Long swore that he, as a blacksmith, made for him to put barbs upon wire in 1873, and states that it might have been possible to make such tools, but that they would have to have been made by machinery. There was no machinery to make them, except common hand drills. (Q. 10.) Witness, during the year 1875, bought a farm adjoining W. H. Long, and during the remainder of that year frequently traveled the road through his farm (Q. 12.) Mr. Moore thinks that the portable board fence was built after he bought his farm in November, 1875, for his cow-yard. This witness testifies that the first time he had anything to do with any tools for putting barbs upon wires was with Henry Long in 1876, when Henry Long showed him how to put barbs upon fence-wires.

On cross-examination, witness stated that he could remember all the blacksmith or job work he done for Mr. Long in 1873, outside of common work. (C. Q. 2.)

Jasper S. Hunt. (Rec., p. 367.)

Is a farmer, living in Delaware county thirty-two years. Knows W. H. Long ever since he was born. (Qs. 1 to 3.) Mr. Hunt states that Mr. I. B. Richmond exhibited at the county fair at Manchester, a strip of wood with barbs in it, which strip of wood was to be hung to the fence wires, by smaller wires and thus cattle be deterred from passing through or injuring the fence. Mr. Hunt states he does not know when Mr. Long got the idea of barbing fence wire, but he had a conversation with him shortly after they saw this barbed strip of wood fence at the Manchester fair, and that he, Mr. Hunt, thought that the barbs could be taken off of the strip of wood and applied directly to the wire. Mr. W. H. Long told Mr. Hunt he theught it was a good idea, and that he ought to procure a patent on it. (Q. 5.) Mr. Hunt states that he afterwards saw Mr. Long, and Mr. Long stated that he had tried to put on barbs in the manner they talked, but that it did not work very well, as some of the instruments broke he had for that purpose. (Q. 6.) Cannot remember what year he saw the patent fence exhibited by Richmond. (Q. 7.) Mr. Hunt recognizes a wood cut, which represents the barbed wood strip he saw at the fair, which is marked "Complainants' Exhibit Rose Strip Fence." (Q. 9.)

George W. Long. (Rec., p. 373.)

He is the same party who before testified in behalf of the defendants regarding this Long fence, and is a brother of W. H. Long, who, in his former deposition, could not fix the date when his brother first put barbs upon wire, was called by the complainants and testified that he knew this Rose strip fence and examined it a number of years ago on a farm since known as the Richmond farm, occupied by M. I. B. Richmond, and that he first saw this Rose strip fence on that farm. Q's 1 to 5.) Richmond had charge of the sale of patent rights. (Q. 7.) Cannot fix the exact date when he first saw

this barbed wooden strip on the fences of the Richmond farm. (Q. 9.) Mr. Long then testifies that it occurs to his mind that he saw the Richmond fence before he saw his brother putting barbs on his fence-wires, as he testified, and that the events were undoubtedly near together as to date. (Q. 10.)

Melville I. B. Richmond, (Rec. p. 379)

was then called by the complainants. Is a farmer, a stockman, and lived in Delaware county for the last eighteen years. Manufactured a fence under letters patent granted to H. M. Rose, dated May 13, 1873, and No. 138,763. Used it on my father's farm in the year 1874, and also had some on exhibition at the county fair in Delaware county in the fall of 1874. (Q. 4.) Witness knows that it was some time in July, 1874, he heard of the Rose fence and knows it by letters that he had that date, and shipments to him of the barbed strip. These letters are in evidence and marked "Complainant's Exhibit Richmond Rose Strip Letters 1, 2 and 3." Witness had also examined the records of the fair, which shows that he exhibited it there in 1874. (Qs. 7 and 8.) Witness recognizes the exhibit Rose strip fence sent to him in 1874. (Q. 10.) He exhibited a rod of this Rose strip fence during the fair and it attracted a great deal of attention. (Qs. 11 and 12.)

Abel W. Daugherty, (Rec. p. 508),

of Dubuque, Iowa, Secretary and Treasurer of Farley & Loetcher Manufacturing Company, and a resident of Dubuque since November, 1873, testified in behalf of complainants that he knows the lumber firm of Knapp, Stout & Co. Company. Thinks the firm has been in business in Dubuque since 1875; was with that company from January 1, 1874, to December 31, 1880, as book-keeper and general charge of the office and road-work, etc. (Q. 5.)

Witness states that the company at one time shipped lumber to Wm. H. Long, Delaware, Delaware county, Iowa, and that "they shipped January 23, 1875, one car load of one thousand "feet fencing" (Q. 7), and that there was not any other

lumber shipped, to his knowledge, to W. H. Long in 1872-'3-'4 and '5. (Qs. 8, 9.) That the company kept books during those years, and he has carefully examined them within the last week to ascertain this fact. (Qs. 10, 11.) That the entries were made in his own hand as to the lumber shipped Long in 1875, and that during the years given, 1872-'3-'4 and '5, the books do not show any shipment to any other party by the name of Long in Delaware county.

Louis G. Sporlein, (Rec., p. 517.)

was then called for the complainants. He is a book-keeper in the employment of the Illinois Central railroad for twelve years past. It will be remembered that the Illinois Central railroad was, until the last two or three years, the only railroad running from Dubuque to Delaware county, or that could carry lumber, and that the testimony of the witnesses is that this car load of lumber which lay in the yard of W. H. Long, of which the fence was built, came from Dubuque, Iowa. Mr. Sporlein testifies that the Illinois Central railroad runs to Dubuque ; was the only road running there until the last year. and that the Illinois Central railroad has now in possession their books, showing shipments and the name of consignee made from Dubuque, Iowa, to Delaware, Iowa, from the fall of 1872 to the spring of 1875. The witness then states that there was no shipment of any merchandise or article of any description made by the way of the Illinois Central railroad from Dubuque, Iowa, between 1872 and 1875, unless it was a small shipment of less than a thousand pounds, and that the first shipment made to W. H. Long was upon January 18, 1875, and was a car load of lumber shipped by K. S. & Co. (Qs. 1-12.) And that between the fall of 1872 and the spring of 1875 there was no other goods or merchandise of any description shipped by the Illinois Central from Dubuque, Iowa, to Delaware, Delaware county, Iowa, to any part by the name of Long whatever, except the car load of lumber shipped to W. H. Long by K. S. & Co. on the 18th day of January, 1875; that he knows the facts above stated

"because of a thorough examination of the books made by "myself (Q. 14), and made for the sole purpose of ascertain- "ing these facts." (Q. 15.)

Witness states that the books of the company do not show any other shipment to any other part by the name of W. H. Long, at any other point than Delaware county, Iowa.

The above testimony makes certain, as far as record evidence can make anything certain, that W. H. Long built no cow-yard or pasture fence in his forty opposite his house before the year 1875. That the car-load of lumber of which he swears he built this fence was not shipped to him before January, 1875, and that he put no barbs of any description on those fences until after he saw the Rose Strip in the year, or had his conversation with Jasper Hunt, in the year 1874. We do not attribute the slightest dishonesty or unfairness to Mr. W. H. Long and son, with the exception that they have permitted their zeal for their friends, these defendants, to bias and give color to an uncertain recollection of dates. The fallibility of memory as to dates and the unsatisfactory character and unreliability of such testimony is recognized by all the text books and re-asserted in the decisions.

Walker on Patents, ¶ 508, p. 359, states the rule as follows: "It is generally impossible to remember, with cer- "tainty, the particular construction of a thing of which no "specimen is known to remain in existence, and most memo- "ries are wholly unreliable on bare questions of dates."

Also *Hawes* v. *Antisdell*, 8 Off. Gaz., p. 688:

"We have constantly to bear in mind, in weighing the tes- "timony of witnesses who speak of circumstances occurring "many years ago, the liability to mistake the particular year, "unless they have some evidence of a documentary character "or otherwise, or some leading fact, in relation to which there "can be no error, upon which they may rely to show the par- "ticular time."

Sayles v. Chicago & Northwestern Railroad, 1 Bissel, 468.

Chester D. Stone Fence.

The defendants have seen fit to resurrect, revise and put into this case a "prior use" fence which was fully presented and discussed in the case of the above complainants against the Grinnell Wire Company, passed upon by Judge Brewer. Judge Brewer states, in his discussion of this fence, as follows:

"I cannot state in detail all the various items of testimony "of this kind, for there is a great volume of it coming from "many witnesses and on both sides. Two or three matters "I may state have led me to doubt seriously the truthfulness "of Mr. Stone's testimony; *first*, the great difficulty of coil- "ing staples upon the fence-wire in the manner and with the "instruments he had. I have tried, and had tried, this matter "experimentally before me. While it may be done, yet the "process is extremely slow and difficult—so slow and difficult "that I think no man would pursue it except under the most "imperative need. Again, Mr. Stone's explanation of the "reason for doing it is, to say the least, an improbable one. "He says that he did it in order to make the people living on "the adjacent track believe that he thought cattle broke the "fence down. I do not think it probable that any man would "take such pains to impress his neighbors with any conviction "as to his own beliefs."

This man, Chester D. Stone, is now presented as the principal witness in this case, to establish the construction and existence of this barb wire fence. It would seem that these defendants must be in dire necessity, indeed, to attempt again to rely upon this fence.

Chester D. Stone (Rec., p. 1025),

states that he is forty-four years old; is a farmer; lived in Delaware county thirty-two years; on his farm about eighteen years, and his farm is 280 acres. (Qs. 1–3.)

Cross-examination shows that his wife owns the farm, and "I don't claim to be worth a dollar in the world, only "the dollar I have in my pocket." (C. Qs. 105, 6.) He states that he put barbs on fence-wire in the spring of 1872,

on a quarter section of land belonging to the White estate west of the poor-house. (Qs. 5 and 6.) The fence was smooth wire. (Q. 8.) "I used fence staples for barbs; put them on "by putting a staple astride of the wire, hammering them on "an iron wedge until the points passed one another, then "placed the edge of the wedge between the points and drove "on the head of the staple until the points of the staple were "spread." (Q. 9.) The points stood out from the wire at right angles. (Q. 10.) They were put on at five different places, and from a dozen to perhaps forty and fifty in a place. (Q. 12.) "Cattle were breaking through the fence, and they "were put on for the purpose of pricking the cattle and to "keep them from breaking the fence, and think they were on "different wires. Most of them were on the middle wire." (Q. 13.) "The extreme north end of the east line was a few "there, perhaps thirty or forty rods south of that were some. "Then there were a few within twenty-five rods, perhaps, of "the south-east corner. They were spread along there, so "that these might have called at the corner. There was a "few along there and a little north of it. What I mean by "that is to include what was at the corner, and just north, as "one count; there was only a few at this place and at the "corner. Then there was some on the extreme west end of "the south line, and a few about the middle of the south string, "it might have been a little nearer the west end." (Q. 15.) Put them on for George H. Bidwell. (Q. 17.) Testified in the case of these complainants against the Grinnell Wire Company. (Qs. 33 and 34.) I afterwards repaired my own fence with a part of it, and removed a part onto a piece of Bidwell's land. (Q. 40.) It was moved in the spring of '73. (Q. 42.) Frank S. Bidwell, my sister's son, helped me put those barbs on the wire in the spring of 1872. (Q. 45.)

Cross-Examination.

Am the same party who testified in the former case. (C. Q. 1.) The charge in my memorandum book was made for repairing the fence, and did not specify the kind of work done. (C. Q. 32.) Saw the account book last Sunday evening. "I think

"it was last Sunday evening; and after I was through looking "at it I laid it down on the table and went to bed, and that is "the last that we can any of us remember of it. Myself and "wife spent an hour this morning in looking for it, but failed "to find it." (C. Q. 85.) I put staples on the bottom wire, for the cattle seemed to be breaking under the fence at that point. (C. Q. 182.) It did not remain as a fence any great length of time. I don't think to exceed a year. (C. Qs. 195, 196.) When I took away the fence, "I dug up the posts as "far as the barbs went. Then I broke the wires about the "length I wanted for the fence I wanted, and dragged it to "the place I wanted to use it, dragging four or five posts, and "the number of pieces of wire I don't remember." (C. Q. 211.)" * * * "The holes being bored through "the posts, and the wire run through the staples, being twisted "on the wire, the wire would not pull through, but drag the "posts along." (C. Q. 212.) Don't know that any wire fence was put in the place of the fence that I took away. (C. Q. 221.) I took away about twenty rods from the north-east corner. (C. Qs. 231–233.)

It will be seen by a comparison of this deposition with the testimony given by Stone before, as recited in the decision of Judge Brewer, that there is a very marked alteration in the character of such testimony—of course designedly altered to escape the criticism of the court thereon.

G. A. Underwood, (Rec., p. 1061.)

The next witness called on this Stone fence, is the same Underwood, who, when a boy, was thrown on the barbed wire fence at the Delhi fair, before narrated. This witness also attempts to testify as to barbed wire being on the farm west of the poor-house, known as the White estate. (Q. 14.) It was a smooth wire with barbs twisted around it. (Q. 19.) What called my attention to it was a piece of a woman's dress and the taking of this piece of dress off of the wire. (Q. 17, 19.) Can't tell how many barbs there were on it. There were quite a number—mostly on the middle wire, and I think on the top. (Q. 20.) The farm was on the west side of the poor-farm and

joined it, *but I think there has been a road laid down between the two now.* (Q. 21.) I think a man by the name of Bidwell occupied it. (Q. 22.) There was no road between the poor-farm and the White estate when I saw the barbs. (C. Q. 2.) Saw the barbs at the north-east corner, or what I supposed was the north-east corner of this land, lying west of the poor-farm. (C. Q. 10.) "The road ran along there, and that was "the south side of the road, and on the north it was not fenced "at all. There was an open piece of ground there. * * * "It commenced at the north-east corner and ran in a north-"westerly direction. There was three wires. The middle had "quite a number of barbs on it, and the upper one a few "barbs on. *There was a rail fence ran north and south be-"tween this land and the poor-farm. I don't know as it ran "north-westerly, but ran diagonally north-west.* (C. Q. 11, 12.) The fence that had the barbs on it was on the "south side of "road." (C. Q. 13–15.) Six or seven rods were barbed right in the corner. (C. Q. 20.) From the corner six or seven rods there was a wire fence, *and then there was a piece of post and rail fence.* (C. Q. 25.) This six or seven rods of fence that had barbs on it was on the north side of the field. (C. Q's. 28, 29.) The post and rail fence was some twenty or twenty-five rods long. (C. Q. 30.) Another piece of wire joined it (C. Q. 33.) (C. Q. 41.) "Have you described all the fence that "formed the boundary of this field on this side; if you have "not, state the others? A. No, sir. There was another piece "of mortised post and rail fence. There was some wire fence "beyond that, with holes bored through the posts, and wire "slid on, and that wire fence was five wires. There was a "small piece of that formed the north fence." Barbs on this five-wire fence. (C. Q. 43.) I should judge from ten to twelve rods. (C. Q. 45.) There was a post and rail fence starting at the west end of this five-wire fence. (C. Q. 49.) It ran north and south. (C. Q. 51.) It ran south from that corner. (C. Q. 52.) Can't tell what fence enclosed the south side of this field. (C. Q. 54.) The fence on the east side was a rail fence. (C. Q. 55.) "There was a little crotch driven into the ground "and a rail laid onto it, and there was stakes stuck up cross-

" wise, and a rider placed thereon." (C. Q. 57.) This rail fence separated the lot from the poor farm. (C. Q. 58.) He could see 600 yards of this fence from the road. (C. Q. 60.) *The old road ran through the poor farm at the time the barbed wire was there.* (C. Q. 71.) Witness then noticed the plat of this land where he saw barbed wire, marked " Exhibit A," and was interrogated upon it, which shows that he was talking about an entirely different piece of land from the White estate, and had mistaken wholly what was expected of him to testify, not only as to the construction and character of the fence, but as to its location. (C. Qs. 91–99.) C. Qs. 185–203 show this witness was a low dog of the most infamous character, and unworthy of any standing or credibility in any court.

D. W. Van Antwerp, (Rec., p. 1082.)

lived in Delaware County since 1859; was living with C. D. Stone the years 1871, '2, '3, '4 and '5, and commenced working for him in the spring of 1874. (Qs. 1–4.) Done work for him on the Bidwell lot, west of the poor farm, which has a road between. (Qs. 7 and 8.) Repairing fence. (Q. 9.) Was a wire fence. (Q. 11.) Discovered some barbs on the fence while repairing it. (Q. 12.) " I can't say how many. I should " think it was five or six panels. If I remember right, it was " on the lower wires. Stood in a low part of the fence, where " the posts kind of heaved out." (Q. 13.) They were common fence staples. (Q. 14.)

Cross-Examination.

Do not know that Stone put them on. (C. Q. 4.) Is the same witness who testified in the Grinnell case. (C. Q. 5.) Don't know what I testified to then. Don't remember whether I swore in that case that I saw the barbs before I went West in in '71. (C. Q. 10.) Saw the barbs on the east side of the road, along the side of the road, running north and south. (C. Q. 21.) The road was there in 1869. (C. Q. 27.)

Frank A. Bidwell. (Rec., p. 978.)

Am twenty-three years old. Clerk in real estate office, Mitchell, Dakota. Resided at or near Delhi, Delaware County, Iowa, in 1871 and '72 until April, 1873. Chester D. Stone is my uncle (Q's 1–3). Know the location of the Poor Farm, and the 160 acres immediately west of it, known as the White Estate (Q. 7). Knew it in 1870, '1, '2 and '3 (Q. 8). Lived upon the farm that adjoined the White estate during those years (Q. 9). My father had possession of it from the spring of 1871 to the spring of 1873 (Q. 10). He built a wire fence. Don't know when (Q. 11). It was used for a pasture (Q. 12).

The witness then goes on to state that he and his uncle prepared or put additions to the fence, as follows :

" Yes, there were slats and staples on the wires between the " posts for stays to prevent the wires from being spread apart " by cattle and other animals. There were also staples clinched " upon the wires so as to prick the animals and keep them off " (Q. 13).

" It was in the spring of 1871 that my uncle, Chester D. " Stone, and myself put these barbs or staples and slats on " that fence " (Q. 14). " My uncle and myself used the tools, " which consisted of slats, staples, a hammer and an iron " wrench. My uncle would put a staple over the wire " astraddle of it, and I would hold the butt end of the iron " wedge under the prong of the staple, while he with the ham- " mer would pound the other prong until the two prongs were " close together. Then the sharp end of the wedge was used " to spread the prongs apart and make them pass each other. " Then I held the wedge on the sharp end thereof between the " prongs, while he with the hammer pounded upon the butt of " the staple until the prongs were spread until the ends thereof " were nearly opposite. Then I held the butt of the wedge " underneath the iron while he pounded staples over the wire " and clinched it tight thereto " (Q. 15).

The slats used for stays looked like ordinary stays (Q. 16) We put on a great many barbs at various places. I don't know

hew many. Can't fix the location. Think on the south side of the tract, and towards the west end, and at a wet place (Q. 17). Staples were used for barbs, such as we fastened the wires to the posts (Q. 19).

Cross-Examination.

It was in the spring of 1871, and I was eight years old (C. Q. 2). My mother and I were there upon a visit (C. Q. 3). Should think the staples were put on all four of the wires, but the greater part of them upon the second and third wires (C. Q. 6). The fence consisted of four single wires (C. Q. 7).

This witness testified in the case against the Grinnell Company, and his testimony is of great value to the complainants, in this, that it shows exactly and in detail the alleged matter of this boy witness and C. D. Stone, in placing the staples upon the wires. It will be recollected that the wires were long fence-wires between posts, and if the Court will attempt to go through the same performance as described by this witness and Stone, with the same tools and under the same circumstances with the most intelligent seven or eight-year old boy obtainable, your Honor will be convinced of the great improbability, if not impossibility, of such performance.

Abram Dubois, (Rec., p. 1098.)

a cooper, and resides at Manchester. (Q's 1 and 2.) Acquainted with the defendants. (Q. 4.) Knows of the piece of land west of the poor house on the other side of the road, known as the White estate. (Q. 6.) Saw barbs on a wire fence there in 1872. (Q's 7 and 8.) Saw them at the north corner at a place pretty near the south-east corner, and another place on the north-west. (Q. 9.) I mean the south-west corner. (Q. 10.) First saw the barbs in 1872. "I think it was along in June. *It was at night.* "*I was after my cow.*" (Q. 13.) "Q. 14. Describe the barbs that were on the fence, "as near as you can. A. As near as I can, it was a wire "twisted about a plain wire and cut off." Witness could not tell how many he saw, their location on the fence or the differ-

ent places he saw them. (Q. 15.) "*They kept tearing fence* "*down, and wherever they would tear it down and repair it,* "*those barbs would go on.* (C. Q. 29.) They would keep "tearing it down about as fast as they could fix it up." (C. Q. 31.) The barbs were a good deal smaller wire than those. (C. Q. 90.) Don't think they could do as nice a job as that with pinchers. (C. Q. 92.) Barbs on all the wires at this point. (C. Q. 96.) The first time I ever noticed these barbs was when I went for corn. (C. Q. 117.) Witness had been talking to the last witness, George Underwood, down to the shop. (C. Q. 154.) Didn't stop to examine the barbs. The wire was pretty well down in the grass. (C. Q's 178–180.) Saw barbs again the same week. (C. Q. 182.) Saw the fence at the north-east corner and the same posts were there that were there when it was built. (C. Q. 189.) "R. "D. Q. 2. I did not examine all of them. I could not say. "I only put my hand on the top wire, and there was only "two or three barbs there."

The above deposition is of great length, and it is only by reading the entire deposition that you can obtain a correct idea of the utter unreliability of the recollection of this witness, and be convinced of the utter unreliability of his testimony.

C. B. Lont, (Rec., p. 1119.)

Lived in Delaware county since the spring of 1867; is acquainted with the defendant Hoag. In 1872 lived a mile and a half from the poor-farm. (Qs. 1–5.) It was fenced with wire in 1872. And I saw it in May or June, 1872, at the south-west corner, down by the bridge. (Qs. 7, 8 and 9.) There were staples, or pieces of wire, cut off. They were rougher than staples are made nowadays. They were twisted around the wire, next to the top wire mostly. (Qs. 10 and 11.) I saw them there three days, when at work on the road. (Qs. 12–14.) Some lengths would have a dozen barbs on, and some not so many. (Q. 16.)

Cross-Examination.

I am the same party who testified in the case of these complainants against the Grinnell Wire Company. (C. Q. 1.) The barbs were at the southwest corner, about thirty-five rods east of the south line. (C. Q. 3.) There were four wires; one next to the top barbed. (C. Q. 10.) *Moved away from my farm in that vicinity March 1, 1872. Came back March 1, 1875.* (C. Q. 34.) Saw Chet Stone taking wire away from there; I believe in 1875. (C. Q. 37.)

It will be noticed that this witness locates seeing barbed wire upon that land in March, 1872, prior to the time that C. D. Stone locates for putting the barbs on the wire.

E. M. White. (Rec., p. 1138.)

Is a farmer Knows Hoag and Thompson. Resides in Delaware county since the spring of 1876. (Qs. 1–3.) Lived in Delhi during the years 1872, 1873 and 1874. Knows the White estate land, lying directly west of the poor farm. It was fenced, east and south sides, with wire. Can't state exactly when. Built by a man by the name of Bidwell. (Qs. 5 and 7.) It was in a dilapidated state in 1873. We passed over it at that time. It was broken down in places, down on the ground. It was late in the evening, after dark. (Qs. 12, 13 and 14.)

This witness states that he and another man were driving in a wagon, and the man with him got out to see where the fence was. When he got into his wagon he gave his team a lick " with the whip. The wagon gave a jerk, and I asked him " what was the matter. And he said he had hitched a strand " of the wire to the wagon axle. (Q. 16.) * * * We got " about three-quarters of a mile from that place, and there was " a couple of men came up behind us with a team. The team " jumped and went out of the road. I asked him what was " the matter with the man's team, and he said probably it was " the wire that he had behind the wagon. * * * I saw " the wire the next morning. It was wrapped around the " hind axle of the wagon. It was sixty to seventy-five feet in

" length. And it had from one to two dozen barbs on it— " what we call barbs now They called them 'prods' at that " time." (Q. 18.)

Cross-Examination.

The same witness who testified in the case of these complainants against the Grinnell Wire Company. (C. Q. 1.) It was in the dark when we got the piece. (C. Q. 9.) Didn't see it that night. (C. Q. 12.) Was satisfied in my own mind that it came from there. (C. Q. 13.) Didn't notice any barbs when I drove through the fence in the morning. (C. Q. 26.) The cross-examination of this witness from C. Q. 33 to C. Q. 48 shows that the witness has changed his testimony materially since giving his former deposition. His whole testimony, anyway, is of the loosest and most unconvincing character in any aspect.

John T. Penn, (Rec., p. 1200),

is a carpenter, and resides at Delhi. Born and raised in Delaware county. Knows the location of the poor farm, and the 160 acres west, called the White estate. (Qs. 1–7.) Knew the White estate in 1872. It was then fenced on east and south sides. (Q. 8.) Four wires with holes through the posts. " Well, there were some stays put on between the posts on the " wires, and in two places that I remember of there was some " wire twisted around the wire that composed the fence, that " I should call barbs. I don't know what else you would call " it—prickers; I think that is all I remember of seeing. (Q. " 9.) * * * As near as I can recollect now, four or five rods " near the southeast corner on the south side, and perhaps as " much or perhaps more on the southwest corner on the south " side." (Q. 16.) Barbed on the second wire from the top and the second wire from the bottom. (Q. 19.) I saw them about May, 1872, and at different times during the year. (Q. 20.) Think there was no other fence on the south side of the White estate in 1871. (C. Q. 4.) There were stays—I should call them stays—that were put between the posts and

fastened to the wires with little staples that were put on to keep the wire from sagging between the posts. The stays were on when I first saw the fence, as I remember it. (C. 9.) I saw it as I was passing along the road. I did not get out to examine it. (C. Q. 12.) * * * "*Never got out and examined it.*" (C. Q. 13.) Cannot say that I was ever along the road on the east line of the White estate in 1871 or 1872. (C. Qs. 26, 27.)

O. A. Wilson (Rec., p. 1209.)

is a cooper; lives in Delaware; is thirty-nine years old; and moved there when he was thirteen. (Qs. 1–4.) Knows the White estate, land west of the poor-house. (Q. 5.) First saw this piece of land the 4th day of May, 1873. Know it was on the 4th or 5th. (Q. 8.) Passed along on the east side of the road running north and south. (Q. 10.) Saw a wire fence. (Q. 11.) Saw barbs on the fence. (Q. 12.) Near the north corner. (Q. 13.) On the middle wires. Could not state the exact number of feet. (Qs. 14, 15.) Might have been five to ten rods. (Q. 16). Should say the barbs were made of staples. (Q. 17)

Cross-Examination.

Had never passed that way before the 4th of May, 1873. (C. Q. 1.) Did not get out of my wagon to examine the barbs. (C. Q. 14.)

Albert E. Charter (Rec., p. 1186.)

is a carpenter, lives at Delhi, and knows the defendants. (Qs. (1–3.) Lived west of Delhi in 1871—west of the poor-farm. (Qs. 5, 6.) Know the White estate—in 1871 and 1872 lived about eight rods from it—from the southwest corner. (Q. 8.) White estate then had a wire fence—four wires. (Q. 12.) There was a portion of it between the posts, and there was a stay put on in the middle, and there was one portion that had wires twisted around and pointed at each end. (Q. 13.) They now call them barbs. (Q. 15.) Could not tell just how many. The place was east of the south-west corner, and an-

other place south of the north-west corner. (Q. 17.) Noticed them only on two wires. (Q. 22.)

Cross-Examination.

He is the same party who testified in the case of these complainants against the Grinnell Wire Company. (C. Q. 1.) Do not know when the barbs were put on. (C. Q. 36.) Saw the barbs in May, 1872. I think it was just before I left there. (C. Qs. 59, 60.) I left the house during the day-time and returned at night. (C. Q. 65.) "I stated that *I do not know* "*anything about the condition of the fence, any further than I* "*saw at that time when I went after the colt in 1872, and that* "*I saw no pointed wires only at these two places.*" (C. Q. 96.) The *stays* "*seemed to be pieces of boards about four inches* "*wide, reaching from the ground to the top wire, put on with* "*staples.*" (C. Q. 97.) Think in a few places there was wire running up and down between the posts. (C. Q. 102.)

J. H. Peters, (Rec., p. 1212.)

the same witness who testified as to the Delhi fair fence, states that he knows the quarter section of land called the White estate; has known it since 1869. (Q. 22.) Knew George Bidwell. (Q. 23.) Was his attorney. (Q. 25.) Bidwell put up a post and wire fence on the south and east sides of the land in 1869—plain wires running through posts. (Qs. 27 and 28.) When asked to describe the fence, the witness said: "Com- "mencing at the southeast corner and running thence along "the road for a number of rods, there were stays and barbs "placed on the wires—stays running up and down. To de- "scribe the stays more particularly, so you could get the idea "—the wire wound around each wire between the posts. I "can't give a minute description as to the manner in which "the barb was put on. As I stated before, I have seen so "many since then, that my memory is confused in regard to "them. I don't think I can be mistaken as to the barbs." (Qs. 29 and 30.) Think it somewhere between 1870 and 1873.

Cross-Examination.

This is the same Col. Peters who testified in the case of these complainants against the Grinnell Wire Company, and states that but for a refreshing of his recollection by conversation and by data he would have entirely forgotten the entire circumstance. (C. Q. 31.) Only examined the barbs on the White estate casually. Witness stated that the fence was broken frequently in many places, and the gaps were mended by twisting the wires together, so that it would leave the ends exposed or projecting. (C. Q. 22.) Knows the reputation of O. A. Wilson, just examined, and that reputation for truth and veracity is below par. (C. Q. 24.)

B. F. Gleason (Rec., p. 1484),

hotel keeper, and lived at Delhi twenty-five years. Knows the White estate land west of the poor-house. Was often by it between 1869 and 1873. (Qs. 1–3.) Sometimes the fences would be half on the ground when I would go along, so that we could go in at one corner, and out at the other, and at other times it would be all up. (Q. 7.) Fence was made of wood, smooth wire and posts. (Q. 8.) Three wires. (Q. 9.) I afterwards saw fence staples, such as they fasten the wire on with, on the northeast corner of the lot. (Q. 11.) Call them barbs now. (Q. 12.) To the best of my recollection in the years 1871 and 1872.

The testimony of this witness was extremely mixed. His cross-examination shows that there are serious doubts whether he has any conception of the sanctity of an oath, and that he has seen a great many barb wire fences in the last twelve or thirteen years, and there is nothing definite in his description of what he thinks he saw on the White estate land.

Andrew Stone (Rec., p. 1494),

seventy-nine years of age; is the father of Chester D. Stone; knows where the White estate land is situated west of the poor-farm. (Qs. 1–3.) George H. Bidwell fenced it—think it was 1872. (Q. 5.) In 1871 and 1872 I saw something that

looked like barbs or staples on the northeast corner of this land. Could not state how they were fastened to the wire, or in how many places. (Qs. 12–15.) Believe I saw them in 1875. (Q. 27.) George H. Bidwell is my son-in-law. (Q. 28.) This is the same witness who testified in the case of these same complainants against the Grinnell Wire Company. On his former examination he said nothing about any barbs or staples being on the White estate land. (C. Qs. 1–4.) This is the same Andrew Stone upon whose land the fairs were held near Delhi before the war. (C. Q. 14.) Witness would not swear that he had not said dozens of times that he never saw any barbs or staples on the wires of the White estate land. (C. Qs. 4, 5.)

J. J. Hoag, (Rec., p. 1850),

is a brother of the defendant, Abe Hoag; lived in Delaware county nineteen years—knows the location of the poor-farm. Knows the land west, but don't know whose land it was. First saw it in 1870, '71 '72, or '73—not sure which. (Qs. 1–8.) Witness states that during one of those years "I was passing through "from the road into the field on the north-west corner of it. "There was a piece of wire caught in my back wheel, and I "got out and pulled it out of my wheel. It had barbs on it. "(Q. 8.) I don't remember how many there was. Don't know "as I remember, but there was several on it. (Q. 10.)" I think they were twisted around the wire. (Q. 11.) Am a brother of the defendant Hoag. (C. Q. 1.) The Hoag defendants owe the witness money. (C. Q. 3.) Cannot state whether the piece of wire was over ten feet long. (C. Q. 19.) This witness shows that during the pendency of the other case, the defendant, Thompson, with the attorney for the defendants, was at his office. (R. C. Q. 3.)

Frederick E. Morgan, (Rec., p. 1467),

lives at Manchester; was a blacksmith in Delhi; knows the White estate west of the poor-house. (Qs. 1–4.) Worked at various places between '70 and '75. Worked for William Davis about the year 1872 or '73, in the spring. (Q. 10.)

There was then a wire fence on the White estate land. (Q. 11.)
" Well, it strikes me there was two wires about the middle of
" the fence that had barbs on, a part of the east side. (Q. 12.)
" There was a wire twisted around the smooth wire." (Q. 13.)

Cross-Examination:

Witness is a day laborer. (C. Q. 1.) Worked for Davis five months. Somewhere from 9th to the 15th of March, 1873 or 1874. Andrew Stone or Louis Beal occupied the land that summer. (C. Q. 6.) He and Chester D. Stone are old acquaintances. (C. Q. 7.) *There were slats put on these White estate fences between the posts—two or three between each post—between each length of fence.* (C. Q. 23.) Gives his deposition solely from recollection.

This concludes the list of witnesses called by the defendants to establish the existence of barbed wire upon the east and south line fences of the White estate for a few months during the year 1872. The principal of the above witnesses were all examined in behalf of the defendants in the case of these complainants against the Grinnell Wire Company, the testimony in that case being much stronger for the defendants than here presented, for the reason that they then called Bidwell, the owner or lessor of the land, and his son whom Stone testified helped him put these identical barbs on the fence-wires. A careful reading of these extended depositions show that there were substantial differences between the testimony of these witnesses in the former case and as here presented. The testimony of all of the witnesses, except Chester D. Stone, is of the most flippant and shallow character, being of parties who had no interest in the fence and simply saw it while traveling along the road. There is, however, as was urged in the trial of the other case, a satisfactory explanation accounting for the formation of the recollection of the honest witnesses who testified regarding the Stone fence. It will be remembered that several of the defendants' witnesses, like the last one, testified that there were slats put on, two or three between the posts. The defendants' witnesses identify these slats as three or four inches wide and stapled onto the wires from top

to bottom. Take three of these slats between the posts and then knock the slats off, leaving the staple upon the wires, and you will have a semblance of a barb wire fence with twelve staples, three upon each wire, between each set of posts, some of the witnesses stating that there was a dozen barbs between the posts. Take this fact in connection with the fact that the wires were very frequently broken and tied together by trespassers who were hostile to the existence of the fence, and you will have a ragged appearing structure which may account for the origin of the recollection of these witnesses.

Complainants, however, did not rest content with the decision of Judge Brewer, or upon the vagueness and incongruities of the defendants' depositions regarding this Stone fence, but called a number of parties who had an accurate and precise knowledge of this fence.

COMPLAINANTS' TESTIMONY IN REBUTTAL OF CHESTER D. STONE, DEFENSE.

Leverett S. Stone (Rec., p. 110),

one of the same parties before examined, and a brother of Chester D. Stone, states that he lived upon and ran the poor-house farm during the years 1871 and 1872 as steward.

The quarter section immediately west was occupied by George S. Bidwell. (Qs. 31 and 32.) The fence was made of smooth wire on the south and west side fences of this Bidwell land in 1871 and 1872. Had my stock in the pastures there those years and repaired the fences; was along there as often as two or three times a week. Left the poor-farm in March, 1873.

Mr. Stone testifies that during the years of 1871 and 1872 and 1873, up to the time he left the poor-house farm, there was no barbed wire of any description on the east and north fences of this White estate or Bidwell land. (Q. 38.)

Alzina Stone (Rec., p. 129),

wife of the last witness, states that they occupied the poor-house farm during the years 1871 and '2; that during these

years George Bidwell occupied the land across the road immediately west. The fences were wire, running through posts, along the roads; that she passed there a number of times and noticed the fence particularly. Witness states that she did not see or know of any barbs being on the wires of this road fence, and does not remember of hearing anything of the kind. Qs. 1 to 15.)

Luther M. Davis (Rec., p. 135.

is a farmer; has lived in Delaware county thirty-two years, and knows of the White estate lying west of the poor house farm (Qs. 1 to 3). My land adjoined this White estate land until I moved away from there three years ago, from that date until three years ago. (Qs. 1 to 6). George Bidwell fenced the land on the farm in 1870 (Q. 11). The smooth wire fences, posts 16 feet apart and wire through the holes; with four wires (Qs. 7 to 10). The wire fence stood there a number of years. The Suttons bought it and took it away (Qs. 12 to 13). I drew my firewood past there, went to Delhi past there, and went to my father-in-law's past there (Q. 14). Between 1870 and 1875 would go past this fence as often as once a week (Q. 15). Know what barbed wire fence is. Witness then states that there were never any staples on the wire on the White estate except those hanging or remaining on when the stays were knocked off (Qs. 18 and 19).

James W. Sutton, (Rec. p. 173),

farmer; lived in Delaware county thirty-two years, about a mile and a quarter north of the poor-house farm, and am familiar with the quarter section immediately west of the poor-house farm for thirty-two years. (Qs. 1 to 5). Remember when it was fenced by Mr. Bidwell (Q. 6). It was posts and smooth wire, holes bored through the posts and wire run through (Qs. 7 and 8). Posts from eight to twelve feet apart, four wires high (Qs. 9 to 12). My father and uncle took this fence away (Qs. 11 and 12) and made fences on their own lands (Q. 14). Saw the fence while it remained there as often as once a mouth (Q. 15). The boys used to

twist sticks in them, and sometimes when we would be going along the fence after it got down in the road of the team, the boys used to pull the wires off for amusement (Q. 17). I used to pass from one to two times a week on the east side, but did not pass the south side as often (Q. 18). Am familiar with barbed wire fences. Mr. Sutton then states that during the time that this wire fence stood on the east and south sides of the Bidwell land, there was never any barbed wire or any barbs on any part of this fence or any barbs hanging on any of those wires of this fence, upon any part or of this fence (Q. 21). Some of the wires which his father and uncle had taken from this Bidwell land was now on the fences of his father's farm (Q. 22).

Peter Jakelin, (Rec., p. 187).

is a farmer ; has lived in Delaware county twenty-one years. Is acquainted with the White estate or Bidwell land immediately west of the poor-house farm. (Qs. 1–3.)

This fence was built by Bidwell about 1869 or 1870. (Q. 5.) Posts with holes and wires run through on the east and south sides. (Qs. 56–7.) Am familiar with this fence from 1870 to 1877. Hauled wood and run a threshing machine in the neighborhood. Know what barbed wire fence is ; never saw any barbs on the wires of the White estate land or any staples, except there might have been a staple hanging on the fence on wires which were frequently broken and spliced (Qs. 13 and 14).

Randolph White, (Rec., p. 207.)

farmer. Lived in Delaware county sixteen years at Delhi. (Compts.' Rec., 140, Qs. 1–3.)

Know the poor-house farm and the Bidwell land immediately west of it. (Qs. 4 and 5.) Remember when he fenced it. (Q. 7.) The fence was posts set in the ground, with holes bored through where the wires were passed. (Q. 8.) There were horse races on this 160 acres that I have attended. Passed by the south and east fence frequently. (Q. 10 and 11.) There

were basswood stays on the wires between the posts (Q. 13) held by staples. (Q. 14.) The stays were rotted and dropped off. (Q. 16.) Witness then states that between 1870 and 1874 there was no barbed wires or barbs of any description on the wires on the posts on the said Bidwell land.

Elijah P. Tubbs, (Rec., p. 225.)

who has before testified, knows where the poor house farm was located between 1870 and 1876. Was familiar between 1870 and 1876 with the fence on the roads of the farm opposite the poor house. Bidwell fenced it in 1869 or 1870 on the south and east sides. (Q. 21 and 22.) It was wire, four wires high, passed through holes and posts. (Q. 25 and 26.) Between 1870 and 1876 my brother and I used to own the 40 acres adjoining this on the south-west. Crawled through this fence a good many times before 1876. Witness then states that between 1870 and 1876 he never saw any barbs or any sharp points of any description on the east and south fences of this Bidwell land; that there was never any staples or barbs on the wires of this fence when he saw the fence (Q. 29 and 30), and there were upright slats at one time between the posts. (Q. 32.)

George D. Smith, (Rec., p. 231.)

Constable, Delhi township; lived in Delaware county thirty-three years, except from 1864 to 1865, when in the army (Q 1–4); know where the poor house farm was located between 1870 and 1875 (Q. 5); George Bidwell first fenced the land about 1869 or 1870 (Q. 6, 7); put a wire fence on two sides of it, holes bored through the post and wires put through—four wires (Q. 8, 9); between 1870 and 1875 used to go that way to Manchester almost always; I have been out there after cattle and I helped repair the south line of the fence (Q. 10); used to go to Manchester sometimes once a week and sometimes twice a week; sometimes I would not go for two or three months, may be; I have been out there frequently after cattle, cows, but I don't know how many times (Q. 11);

helped repair this south line fence of the Bidwell land in the spring of 1874 for Mr. Beale (Q. 13); at the south east corner we built a pole fence; might have been two rods; we occasionally nailed a pole on top of the posts along where the fence was low; we took what wire was left at the south-west corner to repair the rest; we repaired the whole of the south line fence from one end to the other in the spring of 1874 (Q. 14, 15); that wire was spliced in a great many places—had been broken; and the ends of the wire I presume was left sticking out in a great many places (Q. 16); witness then states that he never saw any barbs on the fence, and that there was no barbs of any description on the south line fence when he repaired it in 1874 (Q. 17, 18).

Charles B. Doolittle. (Rec., p. 252.)

The same party before examined; has lived in Delhi since 1872; is acquainted with the poor house farm and the section of land immediately west of it (Q. 1 to 3); there was a post and wire fence on the east and south sides of it in 1872; I saw those fences sometimes almost every day, and sometimes not more than once a week; know what barb wire is, and never saw any barbs of any kind or any staples twisted around plain wires to form barbs on the east and south line road fences of the White estate (Q. 7); passed this White estate land sometimes every day and sometimes once a week during the year 1872 (C. Q. 3): was the sheriff of Delhi county and deputy sheriff for three years; know Chester D. Stone, and went once with the sheriff to arrest Chester D. Stone upon a criminal charge. (Q. 9 to 13.)

We shall leave this "Chester D. Stone fence" with a high confidence that yoru Honor will not find that the defendants have established beyond a reasonable doubt the existence of any barbed wire upon this Bidwell or White estate land, as testified to by Charles D. Stone—and with the high confidence that the conclusion of his Honor, Judge Brewer, in reviewing the testimony as to this fence, was accurate in every respect.

Manchester Fair Fence.

The defendants took the depositions of four witnesses whose object and intention was the establishment of the existence and exhibition of a barbed wire fence at a fair held in Manchester a number of years ago, the intention, of course, being to fix the date of such exhibition prior to the date of the application of the Glidden patent in suit, in October, 1873. To this end they called four witnesses, as follows:

George Ford, (Rec., p. 1492),

Thirty-eight years of age; occupation, not much of anything for an occupation just at present; reside in Manchester. Knew the Agricultural Fair being held at Manchester, Delaware County, Iowa. First fair I attended seventeen or eighteen years ago. (Q.'s 1 to 4.) States that he first barbed fence-wire at Delaware County sixteen or seventeen years ago at a fair on the fair grounds at Manchester. (Q. 6.) Fair held on A. Sheldon's farm. (Q. 7.) "I couldn't tell how many "lengths of fence there was. Possibly two or three and might "have been four. I don't remember whether it was single "wire or double wire, * * * it was barbed with wire. "The barbs made out of wire. I couldn't tell you how they "were put on. Don't remember distinctly enough to tell just "exactly how they were put on. * * * It was sixteen or "seventeen years last fall and I would not be positive but "think it was in September at the fair." (Q.'s 8, 9, 10 and 11.)

Cross-Examination.

Witness states that he was not an officer and did not exhibit anything at the fair. (C. Q. 3.) Cannot remember who did exhibit anything. (C. Q. 7.) Can't say anybody was with me. Has been acquainted with the defendant Thompson for a number of years. (C. Q. 12.) Gives his deposition solely from memory. (C. Q. 13.) Complainants excepted to the deposition of the above witness before cross-examination, because his name was not set up in the answer, and no allegations in the

pleadings of defendant asserting any prior existence of barbed wire at the fair held at Manchester.

Charles Wells, (Rec., p. 1501),

stated that he was a farmer, and that he first saw barbed wire on the Sheldon fair ground, east of Manchester. "As to the "time when, I am not just positive. My impression is it was "sixteen or seventeen years ago. * * * My recollection "is it was not a twisted wire. It was a single wire with barbs "attached to it in some way—how I don't know. * * * "Where, I don't know; my impression is that barbs were not "as close together as the barbs in use nowadays on wire. "Don't know anybody who saw this fence, unless it was "George Ford, who claims he saw it."

The deposition of this witness is very short, and is as uncertain as it is short. Same incompetency as to the other witness.

H. C. Graham (Rec., p. 1843),

Resides at Manchester. I have no particular occupation at present. Attended an agricultural fair east of town on the Sheldon ground; to the best of my recollection, the first one I attended was in 1869. (Q. 5.) I saw barbed wire on the Sheldon fair ground that I have just mentioned; "according to "the best of my recollection it was 1870. Only one fair had "been held previous to that time. (Q. 7 and 8.) There was "two or three strands of what was, or what was called barbed "wire fence; stretched in front of some machinery there. It "was, to the best of my recollection, a single wire with barbs "around it, with sharp points. (Q. 9.) Should think the barbs "were made of wire, the same as the balance of the fence. (Q. "12.) Might have been thirty foot long." (Q. 13.) Witness' reasons for giving this testimony as to date were: "My rea-"sons are, I came here in 1868, and the next year after I came "here was claimed to be the first fair held at Manchester, and "I am quite positive that it was the second fair that I saw "the wire. (Q. 14.) The fairs have been held at Manchester "since 1869, and I have attended each one of them. (Q. 15.)

" Did not interest myself in the fence particularly. (C. Q. 18.) " Do not know who patented it. (C. Q. 19.) Saw the fence " perhaps ten minutes. (C. Q. 22.) Was not an officer or an " employe of the fair. (C. Q. 30.) Exhibited a trotting mare. " (C. Q. 32.) Would not swear it was the time I saw the " barbed wire. (C. Q. 38.) Don't know who the officers of " the fair was. (C. Q. 49.) Tore my clothes on it." [Witness refused to answer what part of his clothes he tore on the wire, and refused to answer any more questions about it and left the stand.] (C. Q.'s 57 to 64.)

(Same objection to the relevancy of this deposition under the pleadings, and a motion is on record to strike the same from the files, which is here insisted upon.)

W S. Jones (Rec., p. 1847),

the last witness called to establish the existence of this Manchester fair fence, states that he is a furniture dealer and resides at Manchester, and moved there in 1868. First fair he attended was on the Sheldon fair ground. (Qs. 1-3.) Saw there a specimen of wire which he supposed was for a fence. (Q. 4.) " I " cannot say as to the length. To the best of my recollection " it was about a couple of rods. Might have been a little more " or a little less. I cnanot state positively as to that. It was " near the agricultural implements, I think. There was some " barbs put on—common twisted wire put around the main " wire. I don't remember whether there was more than one " wire or not. (Q. 5.) * * * I cannot state positively " what year it was. It was either the first or second fair that " I attended at this town. (Q. 7.) * * * The only way " I have of calling the matter to my mind positively is that I " was a member of the band here, and it was while I was a " member the band that I saw that. (Q. 8.) * * * I think " I was a member of the band in 1869, 1870 and 1871." (Q. 9.)

Cross-Examination.

" Don't know whether it was patented. (C. Q. 11.) Have " not been away from Manchester any time since. (C. Q. 13.)

" Fair was held on this same fair ground in the neighborhood " of ten years. (C. Q. 14.) Was not an officer, only a member " of the band. (C. Q. 16.) Don't remember how many mem- " bers there were in the band. (C. Q. 18.) Give my testimo- " ny solely from recollection. (C. Q. 21.) I took no partic- " ular notice of the barbed wire; don't know who exhibited it. " (C. Q. 23, 24.) Am an old acquaintance of the Hoag de- " fendants. (C. Q. 25.) Don't remember who the officers of " the fair was." (C. Q. 26.)

We feel compelled to remark that of all the instances of alleged prior use that have ever come under our knowledge or experience, the above is the most uncertain and unsatisfactory to establish either the existence or construction of any structure or the time of its exhibition. Neither the party exhibiting the above alleged wire fence at the Manchester fair has been called or identified, and defendants called no officer or exhibitor to back up any such assertion or suggestion as above made. The absence of the testimony of these witnesses who know the facts, if they existed, condemns this whole narrative.

Ely v. *McCabe*, 12 Alden, Mass., 323.

The above four depositions and the attempt of the defense to defeat the patent property of complainants by such testimony, is a perfect example and exhibition, however, of the recklessness with which these defendants attack this property, and their total disregard of the methods and manner which they employ to accomplish its destruction. These depositions have no place in this answer, only the name of one of the witnesses examined, Charles Wells, being set up, and his name commingled with a lot of other parties cited as to another prior use fence. The answer must disclose the fences, and " must set " forth the names of persons by whom, and places where, to " allow evidence of prior use."

Earle v. *Dexter*, 1 Holmes, 412.

" The answer alleges knowledge by persons of New Haven, " Connecticut, but not knowledge at New Haven, or any

"other place, held not to support proof of knowledge at "New Haven."

Searls v. *Bouton*, 21 O. G., 1784.

"A witness not named in the answer, is not competent to "prove prior knowledge."

Collender v. *Griffith*, 11 Blatch., 212.

COMPLAINANTS' REBUTTAL OF MANCHESTER FAIR FENCE.

The complainants, however, following their usual plan as to the above defenses, and believing, without the slightest hesitation, that no such exhibition of barbed wire, at a place of the Manchester fair, as to time, construction or anything, as even guessed at by the above witnesses, called the parties who would know if any such exhibition, as suggested, had taken place.

Jonathan Piper (Rec., p. 202),

lives at South Evanston, Illinois, and lived in Manchester from 1867 to 1876, and was principal of the public school there, and traveling book agent, and was secretary of the county fair for the three or four years of the closing of the fair of 1871. (Qs. 1 to 3.) Fairs were held on the Sheldon farm. (Q. 7.) "My business "was to keep an account of the different articles entered for "exhibition, and as a member of the executive committee, to "aid generally in the arrangement of things on the ground. "* * * I was constantly present during the days of such fairs, "and actively engaged in my duties every day, often visiting the "grounds at night. Books of record of all articles entered, "were kept; a list of all show exhibitions licensed were kept, "and all horse trots." (Compts. Rec., 137.) "other articles "might have been exhibited at the fair without my knowl- "edge, as for instance, fleas, gambling devices, etc." (Q. 12.) "All articles exhibited as competing for premiums, were re- "corded. And I think there were but a few articles anywhere "on exhibition around the grounds that I had not cognizance

" of. I was frequently all over the ground, and watchful of " the entire exhibit." (Q. 12, 13.) " Am acquainted with " barbed fence-wire to a considerable extent." (Q. 15.) " First " saw it in 1875. I never saw any barbed wire while I was " secretary of the fairs in the year 1869, 1870 or 1871. Don't " think a panel or section of barbed wire fence could have been " put up there without my knowing and seeing it. Certainly " nothing could have been entered for public exhibition with- " out a record of the same, and of entries were kept for the " fairs of 1870 and 1871, in a book especially prepared for that " purpose." (Q's 15 to 18.)

Lyman L. Ayres, (Rec., p. 221.)

Was foreman or editor of the Union newspaper at Manchester between 1864 and 1873. (Q. 7.) Examination of the files of the papers show that the first of the fairs held on the Sheldon farm was in the fall of 1869. (Q. 12.) " In 1873 I attended fairs, with one exception perhaps, each " day of the exhibition. The paper gave reasonable space, and " I attended the fair generally as reporter for the paper." (Qs. 13–15.) " Know what barbed fence-wire is. Between 1869 " and 1873 am unable to recall anything of that kind in con- " nection with such fairs." (Q. 18.) " Have not the published " records of one of these fairs. Search of the records of the " other three fairs shows no mention of barbed wire. I " think I should have mentioned it briefly, at least, if it had " been there." (Qs. 19–21.) " 1872 was the missing files of " the paper." (C. Q. 11.)

Ira P. Adams, (Rec., p. 488.)

Witness examined by the defendants; is a hardware merchant in Manchester since 1857. (Qs. 1 to 3.) He usually attended the fairs held there. Began handling barbed wire itself as early as the fall of 1874. (Q. 4.) Was an exhibitor at those fairs, and states that he never saw any barbed wire there of any description at those fairs prior to 1874. (Qs. 9 to 11.)

Charles Husted. (Rec., p. 514.)

A lawyer at Manchester, and testifies that he has assisted one of the agents for the complainants in procuring testimony in this case. (Qs. 1 to 5.) That he has had open to him and inspected the books of the Manchester fair from the year 1871 to 1875, both inclusive. That he is familiar with the testimony of defendants' witnesses regarding barbed wire at this Manchester fair, and had searched those books to ascertain by careful and correct knowledge, if any reference is made in any manner to barb wire in those books. (Q. 7 and 8.) And that such books profess to contain everything relating to the respective fairs each year, and the names of the parties who entered them. (Q. 9). Witness has the book with him and it is introduced in evidence in this case and marked "Complainants' Exhibit Manchester Fair Book, 1871 to 1875," and is here present in court. The witness testified that the earliest mention of barbed fence-wire in such books was for the entry of the fairs in 1875. (Q. 11.) Witness states that there was a paper called the Manchester Press, published from the spring of 1871 until some time after the fair in 1875. That he has examined the files of the paper during all that time and that the first intimation of any barbed wire in such paper is under date of March 12, 1875, and contains an advertisement of the Kennedy barbs, headed "Found at last." The next mention is the reporter's notes of the fair of 1875, and relates to Adams Brothers exhibiting a barbed wire fence. (Q. 16.)

These depositions demonstrate without cavil or contradiction that the efforts of the four parties called by the defence in this direction are efforts to recollect something which has not the slightest foundation in fact.

HUTCHINSON FENCE.

Defendants also called four other witnesses to establish the existence of barbed fence-wire on a farm near Manchester as early as the date of the year 1868 and 1869. These depositions

consist entirely of the efforts of the four members of one family, and are not reinforced by any other testimony, such depositions being

Crawford Hutchinson, (Rec., p. 1859.)

thirty-eight years old; resides at Manchester since 1864, and is a "manufacturer." (Q.'s 1 to 2.) Thinks the entire manufacturing "plant is worth $500. Does not own the entire "plant and works by the day. (C. Q.'s 4, 6, 9.) Worked on "Henry Hutchinson's farm and put some wire barbs on his "fence on the wires. (Q.'s 3 and 4.) It was a fence with "posts and wires strung along on them like the old plain wire "fences used to be. The barbs were a piece of wire as I "remember them now, like a staple, sharp at each end. WE "PUT THEM ON WITH A PAIR OF PINCHERS, LARGER AND HEAVIER, "BUT SIMILAR TO THOSE USED IN RINGING HOGS. They were "put on for Henry Hutchinson. As near as I can recollect "now, Joseph Hutchinson and I worked at it by spells. * * * "I cannot say positively whether it was in 1868 or 1869. (Q's "5 to 7.) Do not know whether the pinchers were patented "or hand made. (Q. 6.) I know they were not put on since "1869, for the reason that I left Henry Hutchinson in September, 1869, and have not worked for him since. (Q. 8.) "I have forgotten how long a piece we barbed now. It was "a good while ago, but to my best recollection it was the east "and west fence, on the south side of the farm. Why I think "it was an east and west fence, is that it was on the south "side of the farm. (Q. 9.) Think we barbed three or four "strands. (Q. 16.) I left here in the early spring of 1873, "and with the exception of two or three short visits was not "back here until August, 1876. (C. Q. 13.) Oh, I visited "around two or three parties. "Was occasionally down at "Henry Hutchinson's and to other places I can't now recollect. Couldn't say whether I stayed at Henry Hutchinson's "more or less after 1876. I visited there some. Very rarely "stayed over night. (C. Q. 18.) The fence we put the barbs "on was a line fence. (C. Q. 21.) Think we barbed "all the wire there was there. And think it ran over

"near, not quite half way across the 40. (C. Q.'s 26, 27.) "The east half was the wire fence." The witness then states that they could not make the barbs stick on the smooth wires but could on the rusty wires. (C. Q. 32.) "I SAW THEM TRIED IN THE HARDWARE STORE HERE, AND WE "COULD NOT GET THEM SET DOWN HARD ENOUGH SO BUT WHAT "THEY WOULD WHIRL ON A SMOOTH WIRE. (C. Q. 33.) Saw "those experiments tried on smooth and rusty wire at the time "I put barbs on this fence on the Hutchinson 40. (C. Q. 34.) "Got the staples to put the barbs on the wire at Mr. I. U. But-"ler's in Manchester. I think it was, because we got the barbs "of him and always used to deal with him. THE BARBS PUT ON "THE FENCE WIRE WERE BOUGHT AND SOLD FOR THAT PURPOSE. "(C. Q. 37.) At the time we put on these barbs I think the "pinchers we put them on with were on sale at Mr. Butler's "store, if anybody wanted to buy them. (C. Q. 39.) Pre-"sume we got the pinchers of Mr. Butler. (C. Q. 42.) They "were the same kind of pinchers we saw in the store for sale, "and tried there to put the barbs on the wire. (C. Q. 43.) Mr. "Young, with whom I stopped between 1873 and 1876, lived "just south of my uncle, Henry Hutchinson." (C. Q. 46-50.) Witness gives his deposition solely from memory. (C. Q. 55.)

Joseph Hutchinson (Rec., p. 1865),

Lived in Manchester since 1876. Suppose I come under the head of cashier of Henry Hutchinson, my father's, bank. (Qs. 1 to 3.) "Lived on a farm south of here eight years previous "to that. Crawford Hutchinson is my cousin. (Qs. 5 to 6.) "Assisted in barbing the fence wire on my father's farm. To "fix the date exactly I cannot only by circumstances. (Qs. 11 "to 12.) I fix them in this way as well as I can. WITH CRAW-"FORD HUTCHINSON, OR RATHER I SHOULD SAY IN TALKING WITH "CRAWFORD HUTCHINSON AND THOSE WHO HAVE WORKED FOR "US HERETOFORE, IT MUST HAVE BEEN SOMEWHERE CLOSE ONTO "THE SEVENTIES. I REMEMBER BUYING THESE STAPLES THAT "ARE TWISTED AROUND SOME WIRES, AND HE HELPED TO PUT "THEM ON. (Q. 13.) They were put on a water run or wash-

" out, you would perhaps call it, where a creek was passing " the line there and around a forty which we called the center " of our farm at that time." (Q. 14.) The witness then goes on to state that he has in his possession a piece of the wire which he helped to barb, as follows: " I HAVE A PIECE HERE. " THIS CAME OFF THE WATER RUN. THIS IDENTICAL PIECE I " TOOK OFF FROM THIS WATER RUN THROUGH CRAWFORD HUTCH- " INSON'S INSTRUCTIONS OR RATHER THROUGH REMARKS THAT " HAVE PASSED BETWEEN US. * * * THE REASON I " WENT AFTER THIS PARTICULAR PIECE IS HE MENTIONED THIS AT " THE TIME, AND IT WAS THE CLOSEST AND BEING PUT ON BEFORE " WE LEFT THE FARM." (Q. 20.) This piece of wire is in this record as " Hutchinson Exhibit Barbed Wire."

Witness swears in answer to C. Q. 4 that the piece of wire was on the first mentioned forty from the fence from where he took it crossing the water run. The fence was a line fence and separated us from Mr. Boyland. (C. Q. 6.) " I think the " only piece that WAS ENTIRELY BARBED WIRE WAS ACROSS THE " WATER RUN." The witness then goes on to state that to the best of his recollection, the barbs were bought of Mr. I. U. Butler. (C. Q. 15.) " They came from a keg. (C. Q. 16.) " We put the barbs on with a big pair of pinchers. (C. Q. 19.) " It is my recollection I borrowed them of the party of " whom I bought the barbs." (C. Q. 20.) " C. Q. " 26. Don't you know that at that time Mr. Butler " sold kegs of those barbs and a number of those pinchers or " lent the pinchers when he sold the barbs to a number of " farmers in the vicinity besides your father? A. *I suppose " that he did, but have no personal knowledge of it.* C. Q. 27. " Have you given your deposition solely from your recollection " and from conversations with your cousin, Crawford Hutchin- " son? A. Part from that and part from memory."

Elizabeth Hutchinson, (Rec., p. 1547.)

mother of the last witness, states that Crawford Hutchinson done work for them as near as she recollects in 1869. This witness has examined the Hutchinson Barbed Wire Exhibit. " I recognize it as being exactly like that which the boys put

" on as far back as 1869, and when I first saw it was when " they brought it to the house to show the manner and work- " ing of the pinchers and barbs on a piece of wire. I mean by " the boys, Crawford and Joseph, my nephew and son. By " house I mean the one on Main street in Manchester. (Q. 8.) " * * * I believe in 1869, at any rate as far back, because " Crawford left us then, and it was done before he left. (C. " Q. 9.) Think the pinchers came from Butler's. (C. Q. 3.) " Couldn't tell whether they were marked patented. (C. Q. " 4.) Pretty sure the pinchers were made especially for " putting on barbed wire. (C. Q. 8.) Think they came from " Butler's. That is where we did the most of our trading. (C. " Q. 9.) Did not watch the boys very long putting the barbs " on the wires." (C. Q. 10.) Witness, in answer to C. Qs. 12, 13 and 14, shows she has no reliable manner of fixing the dates of the boys pinching barbs on wires. Doesn't know how much the defendant Hoag owes her husband. (C. Q. 28.)

Henry Hutchinson, (Rec., p. 1551.)

and the last of the Hutchinson family, then took the stand for the defendants. Says he is banker and farmer. Has lived in Delaware County twenty-nine years. (Qs. 1 to 2.) Witness was shown " Hutchinson Barbed Wire Exhibit. States that he has seen something similar on his farm. Says he thinks he had barbs first put on his farm in the summer of 1869, similar to the sample by my nephew Crawford and son Joseph. (Q. 8.) " Nephew last worked for me in 1869. (Q. 10.) His " barbs were put on before I moved on to the farm in 1870. " (Q. 11.) If I remember correctly, my son Joseph and " Crawford used to spell each other in putting them on. (Q. " 12.) Before I moved on the place. (Q. 13.) They were " put on with nippers. (Q. 14.) I think if memory will keep " me right that barbs were put on the smooth fence for a por- " tion of the time running east and west of what would be " termed the homestead forty, with all the buildings on where " there was a hollow with a creek running through it, *and also* " *what we termed the dry run on the same land on the north* " *fence on the main traveled road.* I think so. I think there

" was some there. If not, they were put on shortly after I " went there myself. I am not sure. (Q. 16.) Thomas Boy- " land in 1869 resided on the twenty acres east of the forty I " have described. The creek run from my land through on to " his. (Q. 18.) The course of the creek has been changed " since then. (Q. 19.) The line fence was divided up between " Boyland and myself prior to 1870. (Q. 20.) The creek run " on my part of the fence." (Q. 21.)

Cross-Examination.

Gives his deposition mostly from memory. Don't think there is anything else. (C. Q. 1.) Witness would not swear the creek bed had varied more than two feet since 1869, where it crossed the line fence from he and Boland unless he could see it again. (C. Q. 19.) Son put barbs on the dry run fence along the road in 1869. (C. Q.'s 29–34.) " My son and nephew " put these barbs first on my farm by special order." (C. Q. 35.) Witness' answer to C. Q. 39 shows that he would not swear whether this road fence was barbed in either 1869, 1870, 1871 or 1872. " We borrowed the nippers to put the barbs on " the wires, and think we returned them to the man we bor- " rowed them of. (C. Q. 33, 34.) I was not posted as to barbed " wire fence at that time, and wanted as little as possible. (C. " Q. 49.) Don't remember whether there was barbed wire on " sale of any description within two years after we got the " pinchers to put the barbs on the fence-wire." (C. Q. 50.)

" C. Q. 54. Who first told you where you could get the " pinchers and the barbs to put on the line fence across the " creek? A. I think it was my son and nephew who spoke " of it, who said they could get the barbs in town, and said it " would be a good idea to put them on the smooth wire, and " this, to the BEST OF MY RECOLLECTION, WAS IN 1869. I RECOL- " LECT THEY SAID THEY COULD GET THE PINCHERS LOANED WITH " THE BARBS TO PUT THEM ON."

The witness testifies in answer to C. Q. 70, that, to the best of his knowledge, the barbs were put on the fence crossing the creek between he and Boyland, in the year 1870, when he moved on the farm.

"C. Q. 58. To the best of this memory of yours, are you "trying to give the court to understand that you are the first "man in this locality that purchased barbs and borrowed "pinchers to put them on plain wire. Give us a fair answer if "you can or know how?

"A. *I think I should be very foolish to answer that I was "As I do not mean to say that I was the first man, or know I "was in any shape or manner.*"

The answer of the witness to cross-questions 60 to 64 shows that he has no definite recollection about this whole matter, except what he gets from his nephew and son.

Cross-questions 78 to 81 show the manner in which the witness formulated his recollection of barbed wire as he attempted to give it in this deposition.

We respectfully contend that as to these four depositions we would have been equally justified in resting with entire confidence that no definite date had been fixed of putting barbs upon fence-wire of the Hutchinson farm. We, however, made the facts as to the entire absence of such barbing prior to 1866 certain by the following testimony:

COMPLAINANTS' WITNESS IN REBUTTAL—HUTCHINSON FENCE.

Thomas J. Boyland, (Rec., p. 676),

was called, who is a farmer and who owned and lived upon the farm immediately east of this Henry Hutchinson land between 1868 and 1876. (Qs. 1 to 5. The line fence between he and Henry Hutchinson between 1868 and 1876 was 160 rods, and each kept up our own part of it. (Qs. 11, 12.) Hutchinson kept up the first forty rods on the north and I the next. The witness then states that between 1868 and 1876 the creek always run under the fence which he kept up (Q. 15), and that there was only one water run or creek crossing the line fence between those years. (Q. 18). Witness testifies that between 1868 and 1876 there was no barbed wire of any kind on the fence where it crossed the creek. (Q. 24.) and that he put all the barbs there ever was on the fence cross-

ing the creek. And put the barbs on the fence across the creek not earlier than 1885 or later than 1887.

Freeman A. Lowell (Rec., p. 480),

is a tinner. Lives in Dayton, Webster county, Iowa. And lived in Manchester from November, 1865, to March, 1873, and worked in the tin shop and clerked in the store for I. U. Butler continuously. (Qs. 1 to 5.) Left Mr. Butler's store and went to Nebraska in March, 1873. This witness testifies that between November, 1865, and March, 1873, Mr. Butler never had any staples or barbs for fence-wires in his store of any description, nor any pinchers or tools for putting them on. (Qs. 11, 12, 13.)

Ira P. Adams (Rec., p. 1476),

The same witness before testifying, and a hardware merchant since 1857 in Manchester, states that prior to 1874 there was no barbed wire or staples to put on wire as barbs, sold or on sale at Manchester. The witness examines the barbs on Hutchinson Barbed Wire Exhibit, and states to his knowledge there was no staples or barbs on this exhibit kept in any hardware store in Manchester. (Q. 6.) Witness recognizes two large staples on this Hutchinson Barbed Wire Exhibit as being the kind of staples kept since 1857 for stapling wire to the posts of the fences, and that to his knowledge no other kind of staples were kept or sold in hardware stores. (Q. 7, 8.)

I. U. Butler (Rec., p. 633),

Is a farmer. Now resides in Hughes county, Dakota. Lived in Manchester, Delaware county, Iowa, from the summer of 1857 until the summer of 1883, and his occupation was exclusively and continuously keeping a hardware store. (Qs. 1–5.) Personally superintended it himself and purchased the stock and kept up the store. (Qs. 5, 6.) Knows what barbed wire fencing is. (Q. 7.) He first knew about it

in the year 1876. Dealt in barbs for fence-wire himself. The witness then testifies that the first time he had any barbs or staples in his store to place upon fence-wire was about May 1, 1877, and that the first he ever saw or knew of staples of the size that appear as barbs on the Hutchinson Barbed Wire Exhibit was in the spring or summer of 1877, and that such barbs were put on with pinchers, and that he kept such barbs and pinchers at his store, and first had such pinchers at his store in the winter or spring of 1877. (Qs. 12, 13.) Believes they were marked patented. The witness then testifies that prior to the time he first had those small staples or barbs, such as appears on Hutchinson Barbed Wire Exhibit, he had never seen any staples or barbs for that purpose, except the three-cornered barb called the Kennedy barb. (Qs. 18, 19.) And that prior to the time these little staples were begun te be used for barbs, no hardware store in Manchester had kept or known of any such thing for any purpose. That prior to 1876 they kept common staples, such as they stapled on plain wire with, two of them being on the Hutchinson Barbed Wire Exhibits. (Qs. 23, 24, 25.) Knows Henry Hutchinson, his wife and boys and nephew ; they traded with him considerably. Witness testifies that prior to 1876 he never sold, lent or gave Henry Hutchinson, Joseph Hutchinson or Crawford Hutchinson or any member of the Hutchinson family, a pair of pinchers for the purpose of or capable of putting barbs upon staples of fence-wire, or any staples or barbs to be put upon fence-wire. (Qs. 28, 29.) Witness states that he kept books from 1868 to 1880, and has his books from 1868 to 1876 inclusive, with him, except the ledger of 1868 and 1869, which he thinks was stolen, but had with him the day-book of those years. (Qs. 30–35.) Witness then states that he has examined his books, and that the first charge relating to barbs or pinchers for barbed wire to any member of the Hutchinson family is October 14, 1878 (Q. 37), and that he has examined his books thoroughly and carefully from 1869 to 1876 to ascertain if any barbs or staples were sold to any member of the Hutchinson family during those years, and finds nothing of the kind in connection with that family during those years. (Q. 45.)

Kept the books personally himself, mostly in his own handwriting. (Qs. 47, 48.)

William Boyland (Rec., p. 735.)

is a farmer; between the years 1868 and 1876 lived on the land that his brother owned east of Henry Hutchinson's. (Qs. 1–8.) The first forty rods of the line fence was kept up by Hutchinson, the next forty rods by his brother. Between those dates the creek passed where it does now; not much variation. (Q. 17.) Since first knew the creek it run under Mr. Boyland's fence. (Q. 19.) No barbs put on until his brother put them on across the creek in 1875 or '6. (Qs. 27, 28.) "They were put on after I saw the "Kennedy barbs. (Q. 34.) Never saw, between 1868 and "1876, any barbed wire like this Hutchinson Wire Exhibit on "any portion of my brother's fence. (Q. 36.) Am familiar "with the dry run on the Hutchinson farm, on the south side "of the road. (Q. 46.) Between 1868 and 1876 never saw "any barbed wire like Hutchinson's Barbed Wire Exhibit on "this fence crossing the dry run." (Q. 48.)

Henry P. Duffy (Rec., p. 646.)

is a farmer. Lived in Manchester. Has a farm of 320 acres, which joins Henry Hutchinson's. (Qs. 1–5.) Between 1868 and 1877 frequently passed along the road which separates our farms. Am familiar with the dry run or waterway crossing the Hutchinson farm. (Qs. 11 to 14.) There was a bridge over the dry run. (Q. 18.) Been there about twenty years. Going along that road had to cross that bridge. (Q. 22.) This bridge was washed out, or partially washed out, in 1876. (Q. 30.) I had charge of repairing the bridge, and attended to it. (Q. 33, 34.) Was then road supervisor. (Q. 35.) Witness identifies the fact of the time of the rebuilding of the bridge by conversations with Henry Hutchinson. (Qs. 36–38.) Witness stating that between 1869 and 1876 he thinks there was no barbed wire on the Hutchinson fence along the road crossing the dry run or at any other place, and that if it had been there he thinks he should have known it. (Qs. 53, 54.)

Moving Creek Witnesses, Hutchinson Fence.

It will be remembered that the two Hutchinson boys testified that they took the piece of barbed wire which is offered in evidence off from the fence over the creek, and reiterated this assertion several times. The creek runs under Boyland's part of the line fence and none of the Hutchinson family professed ever to have had anything to do with that part of the line fence. The Hutchinson family seeing the fatality of this fact as a contradiction of their evidence, then attempted to prove by a number of witnesses that the creek had changed its bed since the barbs were put on and then attempted to state that the Hutchinson barbed wire exhibit was taken off the fence where the creek USED TO RUN. We do not care to go into a presentation of this question or analyze the considerable number of depositions taken by either party pro and con as to this matter, but will rest content under the conviction that the court will believe the Boylands and will believe the testimony of the Hutchinsons as first given that the barbed wire exhibit came off the fence over the creek as they testified, and not from the fence at some other point, where they pretend now to find traces of where the creek used to run.

It will be noticed that no witness backs up the suggestion of old Mr. Hutchinson that there were barbs on the wires forming the fence across the dry run about 1869 or 1870, and that two witnesses, Boyland and Duffy, who were familiar with that dry run fence, never saw anything of the kind there. We leave this Hutchinson fence with the firm conviction that its existence has not been established to any intent and purpose as relied upon by these defendants, and that it appears upon the scene at entirely too late a day as an actual construction, if it ever existed, to affect in any way the Glidden invention in suit.

Beer's Fence.

Six witnesses were called by the defendants to establish the existence of a piece of barb wire on a fence, between 1857 and 1860, on the farm of George R. Beers, near DeKalb, Illinois. This same fence was attempted to be established in the case of

the Washburn and Moen Manufacturing Company against Jacob Haish, reported in 10 Bissell, 67. In that case Edwin A. Beers, son of George Beers, testified to the making and using of two or three lengths of barbed fence-wire on his father's farm between the years 1857 and 1860. A large number of witnesses were called to substantiate this deposition of E. A. Beers. That the testimony was ignored by the court in the manner and for the reasons distinctly stated in the above opinion. All of the witnesses who now testify for the defendants in this case testified in that case, as appears by this record. Edwin A. Beers, who swore he made the wire, was not examined in this case.

Defendants' testimony briefly, is as follows :

George R. Beers, (Rec., p. 901),

Forty-seven years old ; a farmer, DeKalb county, Illinois (Q. 1) ; lived in DeKalb county since 1865 (Q. 5) ; first saw barbed wire on my father's farm, think about the year 1857 (Q. 7) ; it was a single wire with barbs on it ; it formed a part of the fence around the hay-stack ; should think No. 9 or 10 wire with smaller barb, probably six inches apart (Q. 9) ; the barb was first twisted around and then extended along the wire possibly one half inch to an inch, then twisted again in the same way (Q. 10) ; could not state the exact length of wire ; think my brother, E. A. Beers, barbed the wire and put it there (Q. 12) ; saw another different wire that formed part of the fence between the yard and hay-stack—board fence—between top and second board, composed of two wires smaller than the first one named, the barb being fastened to one similar to the first (Q. 13) ; saw this in 1859 (Q. 15.)

Cross-Examination.

It is the same George R. Beers who testifies in suit of same complainants against Jacob Haish ; don't remember whether I then swore there was double wire or not (C. Qs. 3, 4) ; have no dealings with my brother at present (C. Q. 6) ; know that my brother was sued by the complainants under their patents,

took out license (C. Q. 10); don't know how old my brother was; he was quite a boy when he made the wire (C. Q. 12); barbed wire on cow-yard; might have been three or four or five rods long (C. Q. 36); am not a mechanic and do not think I could now make a piece of barbed wire like that my brother put on the fence (C. Q. 46); I don't know that I have stated that my brother, P. A. Beers, forged a note, although he may have done so (C. Qs. 77, 79; think E. A. Beers is four years younger than I am (C. Q. 90.)

Horatio H. Mason, (Rec., p. 920.)

is a farmer, residing in Sycamore, DeKalb County; lived in DeKalb County thirty-four years. (Qs. 1-3). Knew Charles Beers since 1857; know his farm thirty-four years; lived about six miles from it. (Qs. 3-6). He had barbed wire on a fence in November or December, 1857, a single wire with what we called barbs on it twisted around that wire (Q. 7); it was one or two panels long (Q. 8); saw barbed wire on the Beers farm in March, 1862 (Q. 10); was collecting a couple of notes of Charles Beers (Q. 11); it was twisted wire on posts and rail fence about two or three rods long, barbs twisted around two wires; barbs about a foot apart; was a barn-yard fence (Qs. 13–15); Charles Beers said the twisted wire was something that the boys got up (Q. 16); I attempted to get over and caught my hand in a barb (Q. 17); saw this wire in October, 1877, on Sunday.

Cross-Examination.

Is the same Horatio H. Mason who testified in the other case, testified to the same facts in a suit of these same complainants against Edwin A. Beers. (C. Q. 3). During the thirty-four years that I have lived in this community have never been offered or held the slightest position of honor or trust by my neighbors or fellow citizens except as vice-president of the Sycamore National Bank (C. Qs. 6-9.) C. Qs. 12-25 show that the witness is not at all certain as to the location and direction of the fences; the fence upon which I saw the

barbed wire in 1857 was only about a rod or a rod and a half long. (C. Q. 29.) The fence upon which I saw the twisted barbed wire in 1862 run north or south about two or three rods. (C. Q. 32.) Never saw either of these pieces of single or twisted barbed wire on the Beers farm but once, except on Sunday, October, 1877. (C. Qs. 40-42.)

Stephen L. Nichols, (Rec., p. 913),

forty-eight; farmer; residing in Mayfield, DeKalb County, all his life; knew Charles Beers in his life-time, for over thirty years; he is dead. (Qs. 1-6.) Was acquainted with the farm of Charles Beers from 1855 to 1865. (Q. 7.) Saw twisted barb wire on this Beers farm in 1860, which was the first barbed wire I saw on the Beers farm. (Qs. 8, 9.) It was on the east side of the road—on the east side of the cow-yard; formed a part of the cow-yard fence between the two top rails. (Qs. 10, 11.) There was the two wires twisted round, and there was another piece of wire, I should judge about six inches in length, twisted around the wire, and one end projecting one way and the other end the other. (Q. 12.) The barbs were ten inches apart. (Q. 15.) I went there to pay a note to George Beers, and in getting over the fence I tore my overalls. I asked Mr. Beers what kind of a fence he had. He said it was one Ed built and put there to keep the cattle from breaking through. I looked at the wire and seen how it was made, then paid him the money for George. (Q. 17.) Strip of twisted wire was about four rods long. (Q. 20.)

Cross-Examination.

Am the same Stephen L. Nichols who testified in the former case of these complainants against Jacob Haish. (C. Q. 1.) Have seen part of my testimony before testifying. (C. Q. 3.) Testified as to these facts in the case of these complainants against E. A. Beers. Don't think I ever saw this barbed wire on the cow-yard fence more than once. (C. Q. 10.) Then only about twenty minutes. (C. Q. 11.) Given this deposition pretty much from recollection. (C. Q. 15.). From nothing else. (C.

Q. 16.) Witness acknowledged that several years ago he made an affidavit in which he stated that he might be mistaken, and probably was, as to there being any barbed wire on the Beers cow-yard fence. (C. Qs. 33, 34.)

Mason McClellan, (Rec. p. 925),

Is fifty-seven years; a farmer; resides in Mayfield, DeKalb County, for thirty-nine years; knew Charles Beers well about twenty or twenty-two years; lived not quite a mile from him (Qs. 1 to 4); saw barbed wire on a fence of Charles Beers' farm in the fall of 1857 (Q. 7); a single wire; it was a cow-yard; might have been three or four rods long; as near as I can remember, probably the barbs were two or three inches apart; the barb was sharp pointed (Q. 7); it was wrapped around a single wire (Q. 8); saw piece on the fence near the stock-well; that was a twisted wire (Q. 9); barb similar to that on the single wire (Q. 10); I undertook to crawl through it or under it and it caught my clothes and tore them some (Q. 13); it compared very similar with the barb wire manufactured by Isaac L. Ellwood, of DeKalb (Q. 14); I saw a piece in the orchard in August, 1877; I testified in the case between Ellwood and Haish. (Q. 17.)

Cross-Examination.

The first time E. A. Beers spoke to me about barbed wire on his father's farm, I said I didn't recollect it (C. Q. 5); have given this deposition solely from recollection (C. Q. 8). An affidavit was then shown the witness which he acknowledged he signed and swore to upon the 8th day of April, 1879, in which he stated "that he never saw at any time any twisted "barbed wire on said Beers' farm or any two wires twisted "together with barbs upon or between them." (C. Qs. 9 and 10.)

John B. Aurner, (Rec., p. 932.)

The last witness called by the defendants in this Beers fence; sixty-seven years old; his usual occupation is loafing; resides at

DeKalb, Illinois, since 1836; knew Charles Beers, of Mayfield township, DeKalb, during his life-time (Qs. 1 to 5). "In the "fall of 1857 I saw a string of barbed wire nailed on top of "the fence to keep the colts from reaching over to the hay-"stack; one end of it was nailed to the barn; don't know "what the other end was nailed to; it was on Mr. Beers' farm; "it protected the stacks from the colts; the colts were in the "barn-yard; it was around the hay-stack; it was cut with a "cold chisel about two and a half inches long; it was held by "some instrument at one end and twisted around the wire, and "a part of it was twisted around" (Qs. 5 and 6); I went to put a sheep over the fence and caught my hand on the sharp points right under there (pointing). (Q. 8.)

Cross-Examination.

Have testified twice before about this same matter (C. Qs. 12 and 13); once in the case of these complainants against Jacob Haish; have given this deposition solely from memory (C. Q. 5); never saw this barbed wire except that one day (C. Q. 6); might have stayed there an hour; that is, the whole time (C. Q. 7); it might have taken five minutes to look at it (C. Q. 9).

We assert as to this fence as to the previous ones—our confidence that complainants could have rested upon the failure of the defendants to establish by competent testimony the existence of barbed wire upon the Beers farm, and certainly could have so rested in view of the fact that all these witnesses testified in the case of these complainants against Haish, and testified without the slightest effect for the purpose desired. Complainants, however, did not so rest, but called parties who were familiar with this Beers farm, who knew that no such barbed wire existed there as alleged.

COMPLAINANTS' TESTIMONY IN REBUTTAL OF BEERS FENCES.

Rouse B. Dunmore (Rec., p. 328),

Lives in Dundee, Michigan, and lived in Mayfield township, DeKalb county, Illinois, between the fall of 1864 and 1876;

knew Charles Beers; knew his home farm, and lived about one-half a mile west from him, and became acquainted with him in the spring of 1865 (Qs. 1 to 5); was familiar with the location and character of the fences on his farm between 1865 and 1875; worked for him during all those years and helped repair all those fences (Q. 7); knew Edwin Beers and saw him every few days during that time; know what barbed fence-wire is, and know that between 1865 and 1875 there was no barbed fence-wire of any description on the fences of the Charles Beers home farm (Q. 11); know when Joseph F. Glidden first got up barbed wire; at that time neither Edwin A. Beers, nor any member of the Beers' family, ever claimed that they ever heard or knew anything about barbed wire (Qs. 12, 13); testified in the case of these same complainants against Jacob Haish, and these same complainants against E. A. Beers on the Glidden patents (Q. 14); witness recognized "Complainants' Exhibit Beers Alleged 1859 Barbed Fence-Wire" as the same piece of fence-wire which was in the other cases, and as the same piece of fence-wire which Beers produced and swore was cut off of the cow-yard fence in 1859 or 1860, and kept by him ever since (Qs. 15, 16).

James Sivwright (Rec., p. 343),

Have lived in Mayfield, DeKalb county, since 1848; known Charles Beers, since 1856, living a mile and a quarter from him until 1863 (Qs. 1 to 5); between 1858 and 1875 was quite well acquainted and a frequent visitor to the family (Q. 12); witness describes the cow-yard and stockwell, their location and construction (Qs. 13 to 15); is familiar with barbed fence-wire (Q. 17); examines "Complainants' Exhibit Beers Alleged 1859 Barbed Fence Wire," and states that between the years 1859 and 1875 he never saw any such barbed wire upon the fences of the Beers farm, and is satisfied that it could not have been there (Qs. 18 and 19); remember when Joseph F. Glidden first invented this barbed fence wire, and at that time neither E. A. Beers, nor any member of his family, ever claimed that they thought or knew, or ever heard of barbed fence-wire prior to its invention by Mr. Glidden (Q.

21); witness testified in the former case, and, to the best of his judgment, "Complainants' Exhibit Beers Alleged 1859 Barbed Fence Wire" was present as a piece of wire manufactured by E. A. Beers. (Q. 23.)

William H. Townsend, (Rec., p. 349),

Farmer; reside at Sycamore, DeKalb County, Illinois; lived there from March, 1847, to November, 1886; knew Charles Beers; lived about a half mile from his home farm, and during his boyhood days played with the Beers family until seventeen or eighteen years old, his playmates being Edwin Beers, John Beers and Ettie Beers (Qs. 1 to 6); played around the barn and stocks (Q. 8); knows what barbed wire is, and remember when Joseph F. Glidden first produced it (Qs. 14 and 15); witness examines "Complainant's Exhibit Beers Alleged 1859 Barbed Fence Wire," and swears, positively, that no such thing was around the fences, cow-yards, haystacks or stockwell of the Beers farm prior to 1874, when he was familiar with the farm (Q. 17); witness testified in the former case and recognized the Beers 1859 barbed wire exhibit as the piece that was then present in that case.

Edmund Adcock, (Rec., p. 357),

Is a lawyer of the firm of Munday, Evans & Adcock; was acquainted with Edwin A. Beers, who was examined before him as a witness in 1879 (Qs. 1–5) in a case of these complaints against E. A. Beers. This witness remembers "Complainant's Exhibit Beers Alleged 1859 Barbed Fence Wire," and recognizes it as the one introduced by Mr. Beers, the defendant, and remembers that Mr. Beers testified that he made about three rods of it in 1859, and cut off this piece and put it in a box and kept it ever since until produced in these cases (Q. 11); that this exhibit was present at the final hearing. (Q. 13.)

Charles H. Lawrence, (Rec., p. 393).

Is a lawyer of Chicago, of the firm of Lawrence, Campbell & Lawrence (Qs. 1 to 4); knows Edwin A. Beers, and recog-

nizes "Complainants' Exhibit Beers Alleged 1869 Barbed Fence Wire" as being the same piece of fence wire in the case in which he was then counsel, and which Mr. Beers swore was the identical piece of wire placed on his father's cow-yard fence by him in 1859. (Qs. 5 to 15.)

John Nelson, (Rec. p. 413),

Resides at DeKalb, Illinois, and is a blacksmith; lived at Cresson, DeKalb County, from 1872 to 1879; made barbs with a gauge and shears to regulate it and by a machine there (Qs. 5 to 10); took a patent out on my barb, which is offered in evidence as "Complainants' Exhibit Nelson Patent" (Q. 12); sold the barbs to farmers who wanted them; barbs just like the barbs shown in the patent (Q. 14); made them at the time I took out the patent (Q. 15); made them of the same size wire represented in the patent; strangers bought the barbs (Q. 18); witness examines "Complainants' Exhibit Beers Alleged 1859 Barbed Fence-Wire," and testifies that nobody could put those barbs on without some kind of a tool to do it (Q. 24); testified in the former case of these complainants against E. A. Beers; at that time witness went down and saw E. A. Beers at his factory, and, to the best of his recollection, he is the same man that he had seen in his blacksmith shop a number of years before. (Q. 28.)

George W. Dunton. (Rec., p. 418.)

Attorney at law; lived in Sycamore since June, 1877; was a notary public in 1879; knew Mason McClellan in that year (Qs. 1 to 4); witness testifies that McClellan made the affidavit marked "Complainants' Exhibit McClellan Affidavit," before him in 1879, and states that this affidavit was read to McClellan before he signed it, and that the jurat to the affidavit is in the handwriting of the witness (Qs., 5 to 10.)

Malcolm McDowell. (Rec., p. 437.)

A manufacturer of Bessemer steel; examined "Complain-"ants' Exhibit Beers Alleged 1859 Barbed Fence-Wire," and

states that the split in the wire of that exhibit contains what is known as the "cold shut," and that it could not have been made prior to 1870 (Q. 14); this witness then states at considerable detail his reason for his knowl edge of this fact, which briefly is, that prior to the year 1870 Bessemer steel wire was made by such a process that it would be impossible to produce a "cold shut" in any such wire, and that by a process inaugurated in 1873, which he describes and gives in full, "cold shut" in wire became of considerable frequency.

The above depositions would seem to make it positive that no barbed fence-wire existed on the Beers farm at the places or during the time testified to by the defendants' six witnesses, and examination of this "Complainants' Exhibit Beers Alleged 1859 Barbed Fence-Wire" discloses the fraudulent character of the assertions of the defendents' witnesses. Edwin A. Beers, at the time he is alleged to have made this identical piece of wire, was a boy just entering his teens. His own brother now states that he is not mechanic enough to produce the wire, and it is perfectly impossible to produce such a piece of wire in the manner testified to or suggested by the defendants' witnesses. The secret of the origin of this wire is undoubtedly found in the deposition of Mr. John Nelson, and an examination of the patent of Mr. Nelson introduced in evidence we believe will convince the court that the barbs which are upon this Beers 1859 Wire Exhibit were made by Mr. Nelson, and were simply applied in later years by E. A. Beers to a piece of twisted barbed wire for the purpose of defeating the Glidden patent or frightening the complainants from any litigation against him. E. A. Beers afterwards took license under this Glidden patent, and we do not believe a case can be found of record where an allegation of prior use has ever prevailed against a party where the party originating and asserting such prior use has taken license and acknowledged the validity of the patent assaulted.

In conclusion, your Honor, of this presentation of the testimony relating to the alleged "*prior use*" fences urged by the defendants in this case as anticipating the Glidden invention, we can only state that we have the faith to believe that your

Honor will not have been convinced from the testimony presented by the defendants that such "*prior use*" allegations are true to the intent, manner and purpose as contended for by the defendants, and that your Honor will conclude that it is one of those cases where the confidence of the attacking witnesses is in proportion to the distance of time that one is removed from the other, and that "their imaginations are wrought upon by the influence to which their minds are subjected and beguiles their memory."

No Hardship for Defendants to Cease the Manufacture of the Glidden Wire.

One of the defendants, Mr. Sol. Thompson, is the patentee of a barbed fence-wire owned, as we understand it, by the defendants, a specimen of which wire was introduced in evidence under the deposition of Mr. Thompson immediately after Int. 19, and marked as "Thompson & Farrell Barbed Wire Exhibit," and machinery for producing the same.

Mr. Thompson then states that this machinery will cut, punch and string the barbs on to the ends of the main wire. All being done at the same time, at the rate of 300 to 500 barbs a minute, owing to the speed at which the machine is running. (Rec., p. 1581, Q. 6.) * * * "The barb is cut from a strip of metal wide enough for the purpose. This strip of metal is "rolled out of, I should think, a No. 10 wire. Rolled out flat." (Q. 7.)

Mr. Thompson then goes on to state at considerable length, the detailed manner in which his barbs are fashioned and placed upon the wire, and states that he has now such a barb-forming and placing machine at Manchester, Iowa, and states that he can manufacture his wire six times as fast as the Glidden wire. "It is no trouble to put on 600 barbs a minute with "this spacing machine." (Rec., p. 1581, Q. 13.) And that the expense in making his barbed wire in comparison with Glidden "I should say the real expense of making it could not exceed one-half." (Q. 14.) The witness going on to state that it would not take half as much metal to make his barbs as it would a Glidden

"barb. I think that these barbs on this wire that I have pro-
"duced, takes about 380 to make a pound, and it takes about
"200 or a trifle less of the old Glidden barbs to weigh a
"pound." The witness states, however, that they never manufactured any of his barbed wire for sale. (C. Q. 20.) And can name but one party now manufacturing sheet barbed metal wire, in the United States.

In view of the above testimony of the active defendant in these cases, it can be no hardship for these defendants to confine themselves to the manufacture and sale of barbed wire in relation to which they are fully protected by their patent property and which they assert upon this record is more effective and preferable in every respect than the Glidden barbed wire of these complainants.

Respectfully submitted,

C. K. Offield.

795

Office Supreme Court U. S.
FILED,
DEC 19 1891
JAMES H. McKENNEY,
CLERK.

In the Supreme Court of the United States.

OCTOBER TERM, 1891.

WASHBURN & MOEN M'F'G CO. and ISAAC L. ELLWOOD,
Appellants,
v.
BEAT 'EM ALL BARB WIRE CO. *et al.*,
Appellees.
No. 128.

Same,
Appellants,
v.
W. W. NORWOOD,
Appellee.
No. 129.

Same,
Appellants,
v.
JOHN D. WILER *et al.*,
Appellees.
No. 130.

BRIEF AND ARGUMENT IN REPLY FOR APPELLANTS.

JOHN R. BENNETT,
Counsel for Appellants.

JUDD & DETWEILER, PRINTERS.

In the Supreme Court of the United States.

OCTOBER TERM, 1891.

WASHBURN & MOEN M'F'G CO. and ISAAC L. ELLWOOD, Appellants, v. BEAT 'EM ALL BARB WIRE CO. *et al.*, Appellees.	No. 128.
Same, Appellants, v. W. W. NORWOOD, Appellee.	No. 129.
Same, Appellants, v. JOHN D. WILER *et al.*, Appellees.	No. 130.

In the Supreme Court of the United States.

OCTOBER TERM, 1891.

WASHBURN & MOEN M'F'G CO. and ISAAC L. ELLWOOD, Appellants, v. BEAT 'EM ALL BARB WIRE CO. *et al.*, Appellees.	No. 128.
Same, Appellants, v. W. W. NORWOOD, Appellee.	No. 129.
Same, Appellants, v. JOHN D. WILER *et al.*, Appellees.	No. 130.

I.

In Reply to the Propositions Advanced by Mr. Singleton, of Counsel for the Appellees.

It is conceded that there cannot be two patents for the same invention. That, indeed, is elementary. But there is no such question involved in these cases, since it cannot be pretended that the Glidden patents of May 12, 1874, and of November 24, 1874, are for the same invention. As a matter of fact, they are for totally different inventions, the patent of November 24, 1874—the application for which was filed October 27, 1873—being for a prior invention to that of the patent of May 12, 1874, which is for a subsequent and subordinate invention.

The dates of the respective inventions are determined by the dates of the applications, and whether or not the two patents are for the same or different inventions is to be determined solely by the claims of the patents and not by what is shown and described in the respective specifications and drawings. The patent of November 24, 1874, which is based upon both a prior invention and prior application, is for a composite structure and not for any of the separate elements composing that structure, whereas the patent of May 12, 1874, based upon both a subordinate invention and subsequent application, is for a slotted-tube coil-spring device, the purpose of which was to keep the wires taut, thereby preventing the barbs from slipping when wrapped around both the wires composing the cable.

No attempt was made in the May patent to claim either the composite structure—which was the subject of the then pending application—or the wire barb *per se*, or indeed any element composing the composite structure of the then pending application. On the contrary, Glidden, in his May patent, disclaimed his invention of the barb, which was a part of his prior invention and which formed an essential ele-

ment of his claimed composite structure, the language of the disclaimer being:

> "I do not pretend to have originated the devices known as 'spurs' or 'prongs' on the wires, they having been used before, but confine myself to the means for holding the spurs at proper intervals on the wires and to the means for attaining a uniform tension of wires, as claimed."

That is, that he disclaimed, as any part of the invention of that patent, the wire barb which formed a part of his prior invention.

What, in legal effect, is the invention covered by a patent is to be determined solely by the claim or claims, and the date of application and not of the patent is the controlling date, and this is true whether it be as to two patents to the same inventor or to two different inventors.

The status of a pending application is not controlled by a patent granted for a subordinate invention and upon a subsequent application, and no authority is cited to support such an absurd proposition. If such was the rule it would prevent a party who had filed an application for his pioneer invention and upon which the grant of a patent was withheld, either owing to objection or interference, from filing an application and obtaining a patent for a subordinate invention to describe and illustrate which it was necessary to refer to the invention which was the subject of his prior pending application.

That Glidden did not intend in and by his patent of May 12, 1874, to in any way reflect upon, much less defeat or limit, his invention which was the subject of his prior application and which at the time of the issuance of the May patent he was striving for in the Patent Office is most conclusively shown by a comparison of the claims of his May and November patents, which proves them to be, instead of for the same invention, for totally separate and distinct in-

ventions, as much so as though they had been made by separate and independent inventors.

Had Glidden obtained a claim in his patent of May 12, 1874, for the same invention as the claim of his patent of November 24, 1874, then undoubtedly the May patent would be a bar to the November patent; but he did not do so. On the contrary, he scrupulously avoided doing so, and in and by his May patent, as shown not only by the claim, but by the specifications and drawings, he claimed an invention which was not only entirely separate and distinct from the invention of his prior application, but one that could not even be applied to it, for it is beyond dispute that you could not apply, and, furthermore, that there would be no necessity for applying, his slotted-tube coil-spring device to the composite structure of the claim of his November patent, for in that structure the barb was applied to one wire and held in position and place by the second wire, the two being intertwisted; so that there was no necessity for any means for keeping the wires taut to prevent displacement of the barbs, as is necessary where the barb is applied to—that is, wrapped around—both strands of the cable.

It is well settled that an inventor having filed his application for his primary invention may, during the pendency of that application, apply for and obtain patents for subordinate inventions or even for improvements based on his primary invention without in anywise affecting or limiting the scope of his prior invention as embodied in his prior application or affecting the patent issued thereon, although the patent obtained be months or even years subsequent in date to the patents obtained for such subordinate inventions or improvements thereon.

Where an inventor obtains two patents for the same invention the subsequent and not the prior patent falls, and this, too, without reference to the date of applications; but where an inventor obtains two patents for different inventions the date of applications is the determining date and

not the date of the patent. So well settled is this proposition as not to need further discussion.

Beyond all question, in legal effect the Glidden patent in suit of November 24, 1874, is the prior patent, and is in nowise affected by either the patent of May 12, 1874, or any reissue thereof.

It is undeniable that Glidden made two inventions: (1) the composite structure of the claim of the patent in suit, one element of which, viz., the wire barb, he was likewise the inventor of, and (2) the slotted-tube coil-spring device for maintaining the tension of the wires where the barb was applied around the outside of both of the wires composing the cable.

II.

Undoubtedly a reissue dates back to the original patent of which it is a reissue; but it is equally true that such reissue can have no greater effect in law than the original of which it is a reissue.

Nor is the patentee estopped in any sense from asserting the claim of his patent obtained upon a prior application and for a prior invention by reason of anything set forth in a reissue of his subsequent patent for a subordinate invention. In legal effect he could take no more in and by his reissue than was secured to him by the original patent.

So the question recurs, What is the effect of his May patent, based upon his subsequent application and invention; upon his November patent, based upon his prior invention and application? None. I submit, then, that a reissue of that May patent can have no greater effect than the original patent of which it is a reissue, and creates no estoppel that was not created by that original patent, and, as the May patent confessedly had no legal effect upon the November patent and created no estoppel, issued as it was upon

a subsequent application, the reissue can have no greater effect.

This precise question was determined by this Court in the case of the *Consolidated Valve Company vs. The Crosby Valve Company* (113 U. S., 175). In that case one Waterman had obtained a patent in 1853 wherein he showed a certain construction, but which was not described in the specification. Subsequently, in 1866, Richardson obtained a patent for his valve. Thereafter, Richardson and Waterman having combined their interests, they applied for and obtained a reissue of the Waterman patent for that which was no part of Waterman's original patent, but was claimed in view of the Richardson patent. It was asserted that Richardson, being in privity with Waterman, was estopped by the reissue from denying anything contained therein, and that therefore the Richardson patent was to be judged in the light of the Waterman reissue; but said this Court in determining that question, speaking through *Mr. Justice Blatchford:*

> "Nothing of all this was found in the specification of the original Waterman patent. It therefore has no effect as against the Richardson patent of 1866 to destroy the validity of that patent."

That is, that this Court looked, not to the reissue, but to the original patent, and by that alone could Richardson's patent be judged.

So here the validity of the patent in suit is not to be destroyed by a reissue of the May patent of 1874, but is to be judged solely in the light of the original patent; and, judged in that light, confessedly it is no bar or estoppel to the patent in suit, based as it is upon a prior invention and application.

It will appear as matter of law that the claim of the reissue is not found in the specification of the original patent of May, 1874, and this has been judicially determined by

his honor *Judge Treat* in the case of the *Appellants vs. Fuchs,* wherein the Glidden reissue was held invalid as not being for that which was the subject of the original patent.

The facts are, as set forth in my brief (pp. 16, 17), that Glidden, notwithstanding the fact that he was the inventor of the wire barb, had omitted to obtain a claim for it apart and independent from his composite structure; and, discovering that omission, he, in January, 1876, endeavored to overcome the effect of the omission by a reissue; and, being advised that under the rules of the Patent Office, sanctioned as they were by judicial ruling, it was necessary to obtain that reissue by a surrender of the patent earliest in date wherein the wire barb was shown, without reference to whether it was described or claimed as part of the invention, he surrendered the patent of May, 1874, and in his application for reissue he made a claim for his wire barb *per se* and introduced a new drawing for the purpose of illustrating the application of that barb; but he did not in that reissue, either directly or indirectly, by express language or inference, include as a part of the invention of that reissue his composite structure of his November patent of 1874. His reissue was solely for the purpose of securing to himself the wire barb *per se;* and he says in his patent:

> "My invention under this division relates to that class of wire fences in which barbs or spurs are attached to wires, and it consists in a short wire with pointed ends coiled around and compressed about a fence wire, as will be hereinafter described. * * *
>
> "My barb consists of a short wire pointed at each end and wrapped or coiled around a fence wire or around such number of wires as the fence-builder shall see fit to unite together. * * *
>
> "By my invention I am able to apply the barbs to fence wires which have been stretched in fences, as well as to apply them to fence wires while constructing the fences."

Showing beyond question that the sole feature of the re-

issue was the wire barb *per se*, viz., a barb formed of a short piece of wire coiled between its ends, whether applied to one strand, two strands, or a dozen strands. The claim was:

> "In combination with a fence wire, a barb formed of a short piece of pointed wire, secured and placed upon the fence wire by coiling between its ends, forming two projecting ends, substantially as specified."

Being a claim for the wire barb *per se*, and not for the composite structure of the claim of the patent in suit. The barb was but an element of that structure. True, it was a part of his original invention, but he omitted to claim it other than as an element of the composite structure, and the purpose of the reissue was to claim that apart from the composite structure; and in doing so he neither enlarged nor did he take from the invention of his composite structure. The claim for his composite structure was in nowise affected by the fact of whether, either in his November patent or in his May patent or in a reissue thereof he had a claim for his barb *per se*. His failure to claim the barb *per se* in his November patent was in law a dedication to the public, so far as that patent was concerned, and his attempt to reclaim it by virtue of a reissue based upon the May patent in nowise affected the claim of the November patent.

Whether the barb was dedicated to the public or secured to Glidden by virtue of his May patent and with that patent fell into the public domain, it did not carry with it his composite structure. That was the subject of his November patent; and while the use of the barb *per se* was open to the public as applied to a single wire or as applied to a double wire or any number of wires it could not be used as an element for the production of the composite structure of the November patents. That concrete thing was his invention.

III.

The patent in suit, of November 24, 1874, contained a generic claim for the composite structure, while the patent of May 12, 1874, contained no such generic claim. It contained no claim for the species of the generic claim. On the contrary, it was a claim for a slotted-tube coil-spring device for maintaining the tension of the wires when the barbs were applied around the wires, as distinguished from the application of the barb to one strand of the fence wire and held in position and place by the second wire, the two being intertwisted.

What was not claimed in the November patent, as I have already stated, undoubtedly was a dedication to the public unless secured in and by another patent. It was not so secured, and for that reason Glidden attempted to secure it by the reissue of his May patent. Failing in that, as the Court says he did in law, the wire barb became public property, and that, too, without reference to the expiration of either the November patent or the May patent. But even had it been secured by a reissue and the reissue maintained in law, the wire barb would then have become public property upon the expiration of the May patent.

So that the November patent deprived the public of nothing. Neither did it extend the monopoly for even a single day. So far as concerns the November patent, the use of the wire barb *per se* has, I repeat, always been open to the public. But that did not carry with it the right to the use of his composite structure, and the same would be true had Glidden in and by the May patent claimed the wire barb *per se* and it had fallen into the public domain with the expiration of that patent.

A monopoly of the wire barb *per se* would, of course, make it impossible for any one to manufacture the composite structure, because the barb is an essential element of it; but

a monopoly of the composite structure does not prevent others from using the barb, as, for instance, its application to a single strand of wire or its application to the outside of a double strand of wire. In fact, it prevents its use only as one of the elements in the composite structure of the claim of the November patent.

It is idle to say that because Glidden showed in his May patent, and subsequently claimed in a reissue thereof, his wire barb *per se*, that when that passed or fell into the public domain, either by failure to claim or by expiration of the May patent, it carried with it the composite structure of the November patent. Indeed, the contention is that even if some one else had prior to Glidden's original invention invented the wire barb *per se* it would not defeat the novelty of his invention for the composite structure, which, under such circumstances, would be for a combination of old elements brought into a new relation for the production of a new result.

The question was asked: Does the claim of the reissue cover the composite structure of the claim of the November patent? The answer is that it does not, as a reading of the claim shows. It is a claim for the wire barb *per se*, whereas, as I have repeatedly stated, the claim of the November patent is for a combination of which the barb is only an element.

It is said that the construction shown in Fig. 1 of the reissue is the same as that shown in the patent in suit. Concede it. That drawing was no part of the drawings of his original patent of May 12, 1874, nor was it any part of the invention for which that patent was issued; nor, indeed, does he attempt in the reissue to claim that structure. It was simply introduced for the purpose of illustrating one manner of applying his wire barb *per se*, to claim which was the object of the reissue. Of this there can be no doubt, for he says in the specification:

"Fig. 1 shows my barb attached to and through a two-strand twisted fence wire."

And that is substantially the only reference throughout the specification that is made to Fig. 1.

Furthermore, in taking his reissue he added another figure to the drawings of the original patent, viz., Fig. 3, which, as he says in his specification, "is a view of my barb."

The fact of his having shown, in the drawing of his reissue, for the purposes of illustration, the compound structure of the November patent, I submit, does not in any way affect or defeat the claim of that patent.

Suppose some subsequent inventor had devised an improvement upon Glidden's composite structure of the November patent, and had, while Glidden's application was pending in the Patent Office, made application for letters patent, which patent issued before Glidden's patent, wherein, for the purposes of illustration, had been shown that composite structure in and as a part of his drawings, could it be contended that thereby the claim of Glidden's November patent was defeated? Certainly not; and, if not, is the proposition in anywise changed by the fact that Glidden himself did that in a subsequent patent? For that, indeed, is all that can by any possibility be said that Glidden did in and by his reissue. He simply incorporated into that reissue a drawing of his composite structure for the purposes of illustration, making no reference whatever to it as a part of his invention or as a part of the claim for which the reissue was taken.

It is not true, as I have already pointed out, that the reissue and the patent in suit are for the same specific invention. They are for different specific inventions.

Conceding all that Mr. Singleton claims, the only conclusion to be drawn is that with the expiration of the reissued patent—that is, with the expiration of the May patent—the wire barb *per se* became public property. That I concede.

Indeed, I concede that, so far as the November patent is concerned, that barb became public property at the date of the issuance of that patent and Glidden's failure to claim it therein as a separate element; but even that does not affect the contention that Glidden was the inventor of the wire barb *per se*, which barb is one of the elements of his composite structure; so that he is not only the inventor of the combination for the production of the new result, but of one of the elements of that combination.

Mr. Singleton's contention under "second main proposition" is based upon the theory that Glidden's patent of May 12, 1874, is, in legal effect, the prior patent, although he has to concede that it was issued upon a subsequent application and for an invention subordinate to that of the November patent. It is unnecessary to answer his contention, based as it is upon an erroneous understanding of the law. In legal effect the November patent, based as it is upon a prior invention and prior application, is the prior patent and is in nowise affected by the May patent. This proposition is abundantly sustained by the authorities cited in my brief and argument.

It is likewise unnecessary to make any reply to the views expressed by Mr. Singleton with regard to the Kelly patent and its effect upon the Glidden patent in suit, as that is also fully treated of in my brief and argument.

It is to be noticed, however, that he rather concedes that there was invention on the part of Glidden, in view of the Kelly patent; but his proposition is that, as Glidden showed his barb in his May patent, it is therefore to be treated as a prior invention, and consequently a part of the prior art, and that therefore there was no invention on the part of Glidden after the date of his May patent in substituting his own barb for the barb of Kelly.

This last proposition, like his first proposition, is based upon a misapprehension of the true rule of law, ignoring as it does the fact that the November patent is in legal effect

the prior patent, based as it is upon both a prior invention and application.

As pointed out on the oral argument, the Kelly barb is held in position and place by compression, and the barb being so secured in position and place he says:

> "I can, when it is desirable to increase the strength of the wire, lay another wire of the same or a different wire alongside of a thorn wire, and can twist the two together by any suitable mechanism. This construction is shown in Fig. 2."

Leaving no room for doubt as to the purpose of the second wire; but reference is made to the sentence immediately following:

> "It tends to insure a regularity in the distribution of the points in many directions."

as if that had something to do with the locking or clamping of the barbs in position and place. It will, of course, be obvious to the Court that it has not. It simply states what is the result of twisting the two wires together, upon one of which the barbs are secured by compression, for it is impossible to twist the two wires together without causing the barbs to point in many different directions; but that is due solely to the twisting, and has no effect whatever in holding the barbs in position and place, that having been already accomplished by the compression which Kelly says is the only means for securing his barbs in place.

V.

The astonishing proposition was advanced on the oral argument that where a claim is for a combination the presumption is that all the elements of that combination are old, and that therefore the patentee is, in effect, estopped from asserting his inventorship of any one or all of the elements of his combination. No authorities were cited to

sustain that proposition for the very obvious reason that there are none. If Glidden was the inventor of the wire barb formed of a short piece of wire coiled between its ends he is, in the consideration of his claim for the combination of which that is one element, entitled to the benefit of it, and that irrespective of the question whether he did or did not obtain a claim for his separate element. There is no presumption arising out of his failure either to describe that element as a separate invention apart from his combination or his claiming it as such. The penalty of his failure to claim it is, so far as the November patent is concerned, a loss of it; in other words, a dedication to the public.

An attempt was made on the oral argument to show that the second wire in the Kelly patent, which it is stated is to be used when it is desirable to increase the strength of the wire carrying the thorns, could be, by being tightly twisted, made to clamp the thorns in position and place. But it was obvious that to do so was to twist the wires almost to the breaking point, whereas when used in fencing the wires are stretched simply to take the kinks out and then secured to the posts by ordinary staples. That you can take the two-strand Kelly wire and twist it to an extreme degree and make it to a certain extent clamp the barb is not to be denied. But that is not Kelly's mode of doing it. That is something that never occurred to Kelly until more than two years after Glidden's invention, when he endeavored to secure it by a reissue, and which reissue his honor Judge Treat declared invalid upon the ground that there was nothing of that character set forth in the Kelly patent.

When the wires are twisted to the extreme degree that they were on the oral argument the second wire, instead of increasing the strength of the wire carrying the thorns, and on which they are secured in position and place by compression, the twisting tends to weaken the structure as a whole by breaking the fibre of the wires, as well as cutting

the wire by its close contact with the sharp cutting edge of the barb.

The arguments of both of the counsel for the appellees upon the question of patentable novelty are based upon the erroneous proposition that the result of Glidden's combination was old, although they failed to point out the prior existence of that result. The result was new, absolutely new, in every sense. True it was barb wire, and because it was barb wire and because Kelly's structure was likewise barb wire, although of a very different kind, counsel for appellees say the result was old; but that is not what the law means by an old result. In this particular instance the result would have been old if Glidden's combination resulted in the production of the Kelly wire; but it did not.

It resulted in the production of an entirely different article, although barb wire. It was a result which, judged by every requirement which the law imposes, is new, in that it is a result which not only differs from, but is at once distinguishable from, every result which preceded it—barbed wire of a different type and character, barbed wire composed of different elements, and those different elements brought together in new relations. Judged by any test which the law imposes, the result of Glidden's combination was new; new in fact, new in law.

VI.

Reference was made to an affidavit given by W. W. Potter (Rec., p. 2016), the son of D. S. Potter, who produced the alleged specimen of the Morley Delhi fair fence. That affidavit, as its date shows, was obtained after he had been examined as a witness on the part of the appellants, and was offered in evidence without either producing him for cross-examination upon his affidavit or attempting to secure his attendance for examination as a witness to elicit the facts therein referred to. The offer of the affidavit was objected

to, and no attempt thereafter made to prove into the case the statements contained therein.

Surely such an affidavit is not to be taken by this Court as true, nor as in any way affecting the affiant's testimony as given under direct and cross examination. Undoubtedly the affidavit was secured from him under very great pressure, since his testimony was in direct conflict with that given by his father. Had the parties obtaining that affidavit and offering it in evidence been honest in their belief as to the truthfulness of the statements, why should they not have produced him for examination, and why should they not have brought out those facts on his cross-examination? Furthermore, why should they not have re-examined Potter, Sr., to deny the statements of his son, in that his son did not know of that relic box, had not been in the habit of going there twice a week to get his father's razor with which to shave, had not been in the habit of going there upon other occasions, and was not familiar with the contents of the box?

VIII.

As to the Alleged Beers Wire, Erroneously Styled Beers Fence.

The existence of that alleged wire is not established, and it is certainly not established beyond *a reasonable doubt.*

The first attempt to establish it was made before their honors *Judges Drummond and Blodgett* in the cases of the *appellants vs. Haish* and against *Beers*, the alleged maker of the fence, and was then overthrown, although the same witnesses were examined as in this case, and in addition many others, including the alleged maker of the fence. It is a suggestive fact that Beers, the alleged constructor of the fence, was himself a defendant, having engaged in the manufacture of barb wire subsequent to 1878—never prior thereto—and that his alleged wire was first heard of when he was called upon to defend himself against the

charge of infringement of the Glidden patent in a suit brought against him by the appellants; that after the circuit court had directed the entry of a decree and an injunction had issued in accordance therewith he applied for and obtained a license, making full settlement for past infringements. In the license that was issued by the appellants to Beers he acknowledged the novelty and utility of Glidden's patent of the invention in suit. A careful reading of the testimony, which is digested and commented upon at page 40 of the appellants' digest of evidence, will lead to the firm conviction that no such wire was ever manufactured and used as claimed.

None of the witnesses who testify to this Beers wire ever saw it more than once, and then only for a few moments in passing; apparently their attention was not even called to it. The testimony of all is given entirely from recollection of what they saw only once, more than 25 years prior to the giving of their testimony. This alleged Beers twisted wire should not be confounded with a single wire, which it is claimed he made, and is mostly referred to by the witnesses examined on the part of the appellees. That single wire, even if it existed, which is not urged, is of no consequence since confessedly it is not the Glidden structure.

Even conceding the existence of the alleged Beers wire to be established, it will be found upon the appellees' own showing to be simply an abandoned experiment. All that is claimed for it is that Beers made some TWO OR THREE RODS in length of the wire and used it at one corner of a feed yard. How long it was used, who saw it, or what became of it does not appear. No more of it was made; no more of it was attempted to be made; none was sold; none was given away, nor was it seen, so far as this record shows, by more than five witnesses, including George R. Beers, the brother of the alleged maker, whereas the witnesses examined by the appellants, who were on the place and were as-

sociates of the Beers boys and ought and would have known if it was there, say that it was not there.

Under all the authorities this Beers wire, even if its existence upon any theory is established, must be held to be an abandoned experiment.

It was suggested on the oral argument that Glidden must have seen this Beers wire, because it was within ten or fifteen miles of where he resided. Of this there is absolutely no proof. The contention that the presumption is that Glidden saw the Beers wire because its use was in his immediate county, so to speak, is too absurd to even merit notice. Furthermore, this alleged Beers wire, if it existed at all, was in 1859 or thereabouts, and then disappeared, so that if Glidden saw it, it must have been at that time, notwithstanding which it appears that Glidden never attempted to do anything towards the manufacture of barb wire until 1873, which is certainly inconsistent with the idea of his having seen it in 1859. Now, if Beers made his alleged wire in 1859 or thereabouts, is it not strange that its value should not have been at once appreciated and the wire manufactured and have gone into universal use as was the case in 1873, when produced by Glidden, nearly 15 years thereafter, and that, too, within ten miles or thereabouts of the Beers farm? Considering the alleged Beers wire from every standpoint, it leads to the same conclusion, namely, that it did not exist.

JOHN R. BENNETT,
Counsel for Appellants.

Office Supreme Court U. S.
FILED.
DEC 15 1891
JAMES H. McKENNEY

IN THE

Supreme Court of the United States

OCTOBER TERM, 1891.

WASHBURN & MOEN MANUFACTURING COMPANY AND ISAAC L. ELWOOD, *Appellants,*

vs.

THE BEAT 'EM ALL BARBED WIRE COMPANY *et al.*, *Appellees.*

No. 128.

SAME, *Appellants,*

vs.

W. W. NORWOOD, *Appellees.*

No. 129.

SAME, *Appellants,*

vs.

JOHN D. WILER *et al.*, *Appellees.*

No. 130.

SUPPLEMENTAL BRIEF FOR APPELLEES.

A. S. BLAIR,
Counsel for Appellees.

IN THE

Supreme Court of the United States

OCTOBER TERM, 1891.

WASHBURN & MOEN MANUFACTURING COMPANY AND ISAAC L. ELWOOD, *Appellants,*	
vs.	*No.* 128.
THE BEAT 'EM ALL BARBED WIRE COMPANY *et al.*, *Appellees.*	
SAME, *Appellants,*	
vs.	*No.* 129.
W. W. NORWOOD, *Appellees.*	
SAME, *Appellants,*	
vs.	*No.* 130.
JOHN D. WILER *et al.*, *Appellees.*	

SUPPLEMENTAL BRIEF FOR APPELLEES.

As stated in our original brief, we made and filed same before appellants filed theirs, viz: We filed one by D. B. Henderson Dec. 1, 1891, and another by A. S. Blair

for other defendants Dec. 2, 1891. Appellants did not file theirs until Dec. 7, 1891. We therefore had to anticipate their brief. We find that the only attorney of record in this case for appellees is John R. Bennett, who files a brief of his own, consisting of twelve pages, to which he adds a purported printed stenographic report of B. F. Thurston made before the court below in trial of this case there, and a purported digest of the evidence, made and signed by C. K. Offield, for the court below, but modified for use in this court by printing in the paging of the printed record herein. As Mr. Offield is not a counsel for appellant in this case, nor was said B. F. Thurston in his lifetime a counsel of record herein, we submit that it may not be a proper thing to do to file these arguments herein.

Counsel for appellants on page 6 of his brief, has purported to set out and quote the specification of Joseph F. Glidden for this patent in suit, but in so doing has omitted the following, viz:

"It also consists in the construction and novel arrange-
"ment, in connection with such a twisted fence-wire, and
"its spur-wires, connected and arranged as above de-
"scribed, of a twisting-key or head-piece passing through
"the fence-post, carrying the ends of the fence-wires, and
"serving, when the spurs become loose, to tighten the
"twist of the wires, and thus render them rigid and firm
"in position.

"In the accompanying drawings, the letter B desig-
"nates the fence-posts, the twisted fence-wire connecting
"the same being indicated by the letter A. C represents
"the twisting-key, the shank of which passes through the
"fence-post, and is provided at its end with an eye, *b*, to
"which the fence-wire is attached. The outer end of said
"key is provided with a transverse thumb-piece, *c*, which
"serves for its manipulation, and at the same time, abut-

"ting against the post, forms a shoulder or stop, which pre-
"vents the contraction of the wire from drawing the key
"through its perforation in said post."

Counsel claims that it makes no difference whether the coiled barb is placed all on one, or part on one, and part on another strand, but Mr. Glidden says in his specification: "Each of these (barbs) is formed of a short piece of "wire bent at its middle portion, as at E, around *one only* "of the wire strands."

This shows that the barbs are to be all on *one* wire, and the sole purpose of the other is a binder wire.

He also claims that the degree of sharpness of the barb is immaterial, but says "they must be sharp, because the word spur is used." A spur means a prong, as spur of a tree, mountain, &c. It has no reference to sharpness, but simply a branching off from the main thing. The patentee shows what he means by his drawing, which is a blunt spur.

Under his second division of brief (p. 8) counsel says that Glidden was the inventor of the spur wire, but the record shows that Mr. Glidden himself says he was not. In his application for this patent, he says: "I disclaim the invention of prongs *per se* broadly, as such have been attached to wire fences before." (Record, p. 1969.)

He also in his May 12, 1874, patent, which shows the same kind of a coiled barb, disclaims the invention of the barb. In that specification he uses these words: "I do not claim to have originated the devices known as spurs or prongs on the wires." (Record, p. 1998.) Also in the interference case between him and Merrill he says he does not claim to be the inventor of the barb. (Record, p. 1983, Int. 24.)

Counsel further say that Mr. Glidden did not lose his right to his invention on the barb because he failed to make a separate claim on the barb, and refers to three

authorities. Neither of them sustains his position, while the first—R. R. Co. *vs.* Sayers, 97 U. S., 554—is against him. A claim for a combination of elements does not cover those elements separately.—Evans *vs.* Eaton, 1 Peters C. C., 332. By taking a combination patent, without a specific claim on any one factor of the combination, is an admission, we believe, that the elements are all old.

Under his fourth division of argument counsel say that Glidden's invention was the foundation of the barbed wire industry. This is not so. Complainant Ellwood testified that Jacob Haish commenced to manufacture barbed wire with coiled wire barbs at about the same time the manufacturing of Glidden was commenced. (Record, p. 462, Cross Int. 13.)

I. P. Adams testifies that he as a hardware man, handled the first Glidden wire he ever heard of, in summer of 1875. (Int. 10, 13, 15, Record, 1476.) And he handled and sold the Haish S barbed wire six months before he sold the Glidden, viz., commenced Oct. 26, 1874, to sell Haish wire. (Int. 7, 8, and 9, Record, 1476.) This Haish wire was a wire barb, and he lived in same place as Glidden and complainant Elwood.

C. F. Washburn testifies that the complainants have never made and sold more than one-third of the wire used in this country, and they are the only ones who make the Glidden wire. (Record, p. 781, Int. 43-44.)

Counsel under his sixth division says the second or binder wire in the Kelly structure was only to strengthen the wire; that it did not and could not clamp the thorns in position. Complainants' witness A. K. Stiles testifies otherwise. He says that the second wire does not bind the barb firmly until the wire has been stretched, which is done when the wire is put upon the fence. (Record, 407, Int. 35.) We will show by a model that it does lock the barb.

In Mr. Thurston's argument made before his Hon. Judge Siras, which is filed herein, and also in Mr. Offield's argument, there made and herein filed, it is claimed that if it should be held that any of the several cases of prior uses were satisfactorily proven they would be relegated to abandoned experiments and would not avail us against this Glidden's invention.

The testimony shows in the Morley case that he not only first exhibited his barbed wire at the Delhi Fair in 1858, '59, or '60, but that he put it into practical use on his various farms, where it existed for some years performing the office of fences turning stock, and it was seen on a fence next to B. Sheldon's as late as 1867. (See testimony of Sheldon, Record, 1,252, Int. 10, 11, 12, 17, 19, 34, 39, 40, and 41.) The Long and the Hutchinson fences are still in use, and have been ever since they were made.

The single and double barbed wires on the Beers' fence were put into actual operation on the Charles Beers' farm, and the single one was seen there up to Oct., 1877. (See testimony of Horatio A. Mason, Record 921, Int. 18, and of Mason McClellan in August and September, 1877, Record 926, Int. 15 and 16.)

Mr. Thurston admits the Long fence, but says that it was made in 1875 instead of 1873, as Long and others state, and fixes it by the fact that they proved that a car load of lumber was shipped to Mr. Long from Dubuque in 1875. Look at digest of Mr. Long's testimony, p. 86 and 87 of Mr. Offield's argument, and it doesn't show that Mr. Long testified where he got his lumber, but says he don't know.

Jeremiah Shade is produced by complainants to show that Mr. Long had no board fence on his land in 1875 (where we showed that Mr. Long put up his barbed wire in that year) and had no such fence up to May, 1874, on

cross examination stated: "There were no passenger "trains run while we were in the country. We had to "cross the track every time we went from father's house to "the farm. I wasn't in the country when they commenced "running passenger trains by Henry Long's farm. They "did not run in '72, and I am not mistaken in my dates. "I did not know anything about the condition of Mr. "Long's fences after the passenger trains commenced run-"ning regularly on the road." (Record, p. 295, Cross Int. 39 to 45 inclusive.)

The testimony of defendants' witnesses, Willson and Scofield, in our brief by A. S. Blair, p. 89 and 90, shows that the trains commenced running on that road in fall of 1871. (Record 1,533 and 1,509.)

Also complainants' witness, F. B. Doolittle, testified that "the trains on that road commenced running regularly in 1872, Oct." (Record 480, Cross Int. 63.) This disposes of the testimony of Mr. Shade. He is mistaken in the date when he left the county and knew the Long fences.

The testimony of complainants' witness Geo. C. Patterson is reviewed on page 42 of our Mr. Henderson's brief. On cross-examination he corroborates Mr. Long.

Also the testimony of their witness Charles Moore on page 43 of said Henderson's brief.

Our time is too short before the hearing of this case to go into a review of the testimony of the various witnesses of complainants in rebuttal of these different fences, but the cross-examination of nearly all of them shows about the same want of knowledge as the witnesses before named.

Mr. Offield's brief filed herein, purporting to give a digest of the testimony of all of the witnesses in the case, is such a strange mixture of assertions, arguments, theories, and of purported testimony of witnesses that we hardly know how to treat it. As it was not filed until

the 7th inst., and the case is likely to be reached most any day, we dare not take the time to review the whole of it in this supplement before time to file it, and have to only show some of the unfairness of the digest and review testimony of an occasional witness.

The testimony is unfairly stated and apparently with an improper design. Most of the witnesses as to the Morley fence are old men and retired farmers, having ceased work as they ought to have done. When asked the preliminary question as to age and occupation, &c, would state that they had no occupation. This, of course, was on account of their age. Yet the counsel takes advantage of this, and starts with the statement that witnesses *had no occupation*, thinking, probably, to create the impression that they were idlers, and not entitled to credit. For instance, E. Haley (p. 14 of Mr. Offield's argument) counsel states has *no occupation*. This witness is not only an old man, but owns 500 acres of land. (Record, 1088, Int. 1 and 4.) Aaron Sullivan, Mr. Offield says, is a loafer. His age was 75 when he testified. (Record, p. 1161, Int. 1.) J. Lukenbill was 70. (Record, 1145, Int. 1.) And so on. Every witness of ours he makes some slurring remarks about. Mr. H. L. Bates, the man who helped Mr. Morley make his barbed wire, is similarly described by counsel as having *no occupation*. He ventures to ask the witness J. F. McKay if he knew this man Bates, "a man who now has no occupation, except his wife keeping boarders," to which the witness answers: "He is a very great worker. He is idle from necessity; from rheumatic affliction." (Record, 1452, Int. 4.)

A similar slur is sought to be cast upon the witness Potter, who is the man who produces the Morley barbed wire exhibit. Counsel asks witness S. R. Young if he "ever knew that Potter had money enough to get out of

"town," &c., to which witness answers: "Mr. Potter is "considered well off." (Record, 1459, Int. 54.)

The whole digest abounds in such slurs, but we will note no more of them. The reply would be about the same in each case.

Witness Spangler, counsel states, is a man who for 23 years has owned no property. The testimony shows that he owns a farm of 200 acres. (Record, 1420, Int. 11 and 12; and 1422, 1 and 2, Re-direct.)

The complainants put a Mr. Booth on the stand, who is shown the Delhi Wire Exhibit, and asked if the barbs were cut with shears, and he says no. (See Offield's argument, p. 34.) And this is to contradict Mr. Bates; but Mr. Bates testifies that the barbs were cut with a cold chisel. (See Mr. Bates's answer to Int. 17, Record, p. 1322.) This Booth is not asked about a cold chisel cut, so his testimony does not effect Mr. Bates's testimony.

The same counsel makes an attack on the Morley Delhi Wire Exhibit. (Page 10 of argument.) This is absolutely unwarranted. Not the slightest evidence is offered touching the effect that ammonia would have on iron. It is alkaline in property and could not oxidize iron like an acid, and it would seem that grease put on would have the effect of arresting oxidization, instead of promoting it. His theory of chemical effects is about as absurd as are his opinions as to the facts.

We do not deem it necessary to go through with all this strange mixture in said argument. We will, however, call attention to the cross-examination of complainants' witness, I. U. Butler, who was called for, and counsel claim did effectually overthrow the Hutchison fence. It will be remembered that our witnesses, the Hutchinson family, testified that they put staples on smooth wire on the Hutchinson farm in 1869, with pinchers such as farmers used in ringing hogs, and they thought they got

the staples and pinchers of I. U. Butler. (See our testimony on pp. 74, 75, and 76 of Brief filed by A. S. Blair.)

To contradict this, complainant put on the stand said Butler, who testified in his direct that he did not deal in such staples nor pinchers until 1877. But on cross-examination he states:

"I presume I bought fence staples in 1867; bought "them by the keg. I continued to buy them through "1867, 1868, 1869, and up to the time I sold out. I "bought farming pinchers in 1868, a great many of "them."

(Record, p. 640, cross-int. 36 to 41 inclusive.)

This witness also testifies that he received over $100 and expenses for going to Chicago, and testifying in this case, and did not go on a subpoena. (Record, pp. 645 and 646, cross-int. 127 and 128.)

This utterly overthrows this witness's direct testimony and also overthrows that of his brother-in-law and clerk, F. A. Lowell, who also testifies that "Mr. Butler did not "deal in staples for barbs on fence wire nor pinchers to "put them on with up to 1873." (Record, p 481, Int. 11 and 12.) He does not, however, say that Mr. Butler did not have fence staples and farmers' pinchers for sale during that time.

This testimony of complainant's being what counsel relies on almost exclusively to overthrow the Hutchinson fence, and, as we think, utterly fails to do so, leaves this fence unquestionably proven by defendants.

We, therefore, leave this digest and will return to the argument of Mr. Thurston.

Replying to Mr. Thurston's argument, first, as to his claimed adjudication of the patent in suit, by Judge Treat in case of these complainants *vs.* Frechs, 16 Fed. Rep., 661, we say this patent was not involved in that case. The action was upon other patents and reissues and

anything he said therein in reference to this patent is not an adjudication of this patent, but was entirely outside of the case, and his statement of the principle involved in this patent clearly shows that this patent was not discussed therein, or, if so, that it was not fully done.

Judge Shiras, in this case, on p. 32, of the Record herein, in speaking of that case before Judge Treat, says: "The judicial conclusion thus reached and announced "does not determine the question now under consideration, "nor does it relieve this court from the duty of examining "and determining it." In this view of Judge Shiras we think this court must concur. This Judge further says, in relation to this binder wire of Kelly (p. 33 of Record), "A glance at the drawing or at a fence (Kelly wire) "shows that the necessary effect of the twisted wire is to "block the movement of the points, etc." Our opinion, therefore, is that the opinion of Judge Treat can not figure in this case. By the showing of this coiled barb in his May 12, 1874, patent, No. 150,683, by Mr. Glidden while his application for his patent, the one in this suit, was pending, and afterwards obtaining a reissue of that patent in two divisions, in one of which, 6,913, he claims the invention of the barb, ignoring in the reissue this subsequent patent involved in this suit, he virtually abandons any thought or idea of authorship of the barb in this Nov. 24 patent.

In the decision of Judge Drummond he says this patent of May 12, 1874, and the reissues, in connection with the patents of Hunt and Kelley, deprive the Glidden patent, of November 24, 1874, of any invention which is patentable. 4 Fed. Rep., 900.

To avoid this objection the complainants insist that the patent of May 12, 1874, is not an anticipation of the patent of November 24, 1874, because the application for this last patent was filed in the Patent Office October 27,

1873, and the application for the former March 14, 1874.

The answer to this is that the invention is shown and described in the patent of May 12, 1874, and that if the patentee had desired to reserve this for the patent to be issued, on a prior application, he should have so stated, and that it would be claimed in such subsequent patent. But instead of doing this he permitted the patent to issue on the last application and then reissued this first patent, claiming this twisted wire and barb as his invention and as included in this patent of May 12, 1874. This is an estoppel *in pais*, if there ever was one, in regard to any claim that this twisted wire and barb is covered by the patent of November 24, 1874. The claim in the reissue of the patent of May 12, 1874, reissued February 8, 1876, No. 6,913, is:

"In combination with a fence wire, a barb formed of a short piece of pointed wire, secured in place upon the fence wire by coiling between its ends, forming two projecting points, substantially as described."

The drawing shows a barb coiled on a fence wire and a second wire twisted around the first and over the barb so as to hold it in place.

The drawing of the Glidden patent of November 24, 1874, shows this same construction, and the claim is:

"A twisted fence wire having the transverse spur wire bent at its middle portion about one of the wire strands *a* of said fence wire and clamped in position and place by the other wire strand *z* twisted on its fellow, substantially as specified."

Now, this is just what the drawing shows in the reissue of the Glidden patent of May 12, 1874, and the patentee can not be allowed to say at this time that it was not a part of the invention he patented in that patent. In obtaining this reissue he admits that he obtained in May, 1874, a patent for the invention for which he made an

application in October, 1873, and that the patent obtained November 24, 1874, as the result of such prior application was a second patent for the same invention.

An inventor can not have two patents for the same thing; therefore the second patent must be declared invalid in consequence of the acts of the patentee. The estoppel is complete. The patentee or his assignee can not come in now and for the purpose of sustaining this suit allege that his obtaining his reissue of the patent of May 12, 1874, was a fraudulent proceeding on his part, and that it should be entirely set aside, when he can no longer use it.

It seems to us that the case of the Suffolk Mfg. Co. *vs.* Hayden, 3 Wall, 315 (318 and 319), should determine which is to be considered the prior patent in the case before the Court.

In that case Hayden had made an application for a patent in 1854. In 1855 he made application for a patent which issued March 17, 1857. In June, 1857, he made application for a patent for part of the invention described in his application of 1854 and a patent issued Dec. 1, 1857. Afterward, in 1860, a patent was granted on the application of 1854, and the Court (page 319) says: "And as is alleged for the same improvement embraced in the patent of the 1st of December, 1857, the one in question. And it is insisted that, for this reason, this prior patent for the same improvement is void. This is obviously a misapprehension. The last, not the first, is void.

In this case before the Court Glidden made an application for a patent on an improvement in wire fences October 27, 1873. While this application remained in the office, on the 14th of March, 1874, he made another application for an improvement in stretchers for wire fences, on which a patent was granted May 12, 1874, which was

afterward reissued, No. 6,913, February 8, 1876, for an improvement in barbed fence wire, and covered the invention described in his application of October 27, 1873. This application of October 27, 1873, was subsequently granted and a patent issued therefor November 24, 1874.

Under the ruling just cited this last patent of November 24, 1874, must be held void, and the patent of May 12, 1874, valid. If for this reason this patent of November 24, 1874, is held to be void, then this suit must fail.

A. S. BLAIR,
Counsel for Appellees.

Office Supreme Court U. S.
FILED.
DEC 15 1891
JAMES H. McKENNEY

IN THE SUPREME COURT OF THE UNITED STATES.

OCTOBER TERM, 1891.

No. 128.

WASHBURN & MOEN M'F'G CO. and ISAAC L. ELLWOOD,

Appellants,

vs.

BEAT 'EM ALL BARBED WIRE CO., et als.,

Appellees.

No. 129.

SAME,

Appellants,

vs.

W. W. NORWOOD,

Appellee.

No. 130.

SAME,

vs.

JOHN D. WILER, et al,

Appellees.

Argument of the late Mr. BENJAMIN F. THURSTON.

JOHN R. BENNETT,

Counsel for Appellants.

LIVINGSTON MIDDLEDITCH & Co., Printers, 149-153 Leonard St., N. Y. City.

IN THE

CIRCUIT COURT OF THE UNITED STATES,

NORTHERN DISTRICT OF IOWA,

Eastern Division.

WASHBURN AND MOEN MANUFACTURING COMPANY and ISAAC L. ELLWOOD vs. THE BEAT 'EM ALL BARBED WIRE COMPANY, ET AL.	In Equity.

Closing Argument for Complainants.

MAY IT PLEASE YOUR HONOR :

It becomes now my duty, in the last act of presentation of this long contested cause, to submit such considerations as in the opinion of the complainants should be weighed by your Honor in reaching a conclusion, with the purpose of aiding the Court, as far as is in my power, to reach that result which we believe to be the right of the cause. I have been impressed with the great patience which the Court has already displayed in listening to my opponents and the presentation of the complainants' case which has been made by my associate. I have, therefore, the assurance that if I am intelligible I shall receive the ear of the Court. If the reasoning which I submit shall recommend itself to your mind, it will enlist attention,

and if it shall be fortified by approved judicial authority, it will command assent. More than this I cannot ask, and less than this your Honor would not refuse.

The exhaustive discussion which has been made by my associate of the testimony relating to the alleged prior Morley, Long, Stone, Hutchinson and Beers fences, relieves me of the necessity of considering in detail those subjects. I could add nothing to that presentation. If attempted by me it would be necessarily superficial. A careful analysis has been made of the testimony relating to each of the fences, and has been put into print for the aid of the Court. The accuracy of that statement which my associate has prepared can be readily tested. The work of determining whether any one of the alleged instances of prior use is made out must be performed in the closet, and after a careful weighing of the character of the witnesses as they have displayed themselves upon the record, the sufficiency of their knowledge, the probability of the truth of their statements, and the fact whether their recollections, after a long period of time, have or not become insensibly associated with facts which are now within their every-day knowledge and experience, your Honor will find whether any instance of any prior alleged fence construction has been established. If after such careful review, this Court is not satisfied that every allegation which has been made of the existence of a prior fence structure affecting the Glidden invention is not overwhelmingly overthrown, then no word of mine can change the conviction of the Court. I shall not, therefore, attempt to do more upon this branch of the case than incidentally, in the course of my discussion, to remind the Court of those tests which the experience of the Courts in other cases where facts were sought to be established upon general recollection of many years before, has applied to determine the reliability of testimony of the class which we have insisted is presented by the defendants in this case.

The Glidden Patent Dated November 24, 1874, No. 157,124.

At the outset we should understand precisely the controversy which it is the duty of the complainants to affirmatively maintain. The charge is that the defendants have infringed the letters patent of Joseph F. Glidden, dated November 24, 1874. The claim of that patent is as follows:

"A twisted fence-wire, having the transverse spur-wire D "bent at its middle portion about one of the wire strands of "said fence-wire, and clamped in position and place by the "other wire strand *z*, twisted upon its fellow, substantially as "specified."

It will be observed that the claim does not set forth that the invention consists in the simple fact that there is a twisted fence-wire, or in the single fact that there is a transverse spur-wire coiled between its ends around one of the fence-wires; but it is a claim for an improvement in fence—for a composite structure which is made up of a fence-wire around which transverse spur-wires have been coiled at their middle portions, and which spurs are clamped in position and place by the intertwisting of the wire upon which the barbs are placed with a fellow binding-wire.

Letters patent, under the law, are granted for improvement in machines, manufactures and compositions of matter. The invention under consideration relates to a manufacture, or, in other words, to a product presenting peculiar properties and characteristics which are supposed to distinguish it from anything previously known in the general class to which it belongs. Each one of the elements composing it may, indeed, be old; the invention is supposed to reside in the bringing together of such elements in co-relation with each other to produce, as an organization, a thing distinguishable from everything which preceded it in its utility and character. That utility may consist, in the sense of the patent law, either in the better efficiency of the structure as a barbed fence, or in the better way in

which the barb is held in its position and locked upon the fence-wire as the result of the combination or co-relation of the members composing it. Your Honor will understand that I should claim with confidence that even if it were true as a fact, that some person prior to Glidden had coiled a spur-wire between its ends around a single strand of fence-wire, the invention set forth in the present patent would not be anticipated, for the reason that such structure would not exhibit the combination, with such single strand of fence-wire and coiled barb, of an intertwisted binding or locking wire.

We have always asserted with confidence, and we assert now, that Glidden was in fact the first person to make a barb for a fence-wire by coiling it between its ends for application to a fence-wire. Such was the judgment of the Circuit Court of the United States for the Northern district of Illinois in the year 1880. No impeachment of that conclusion was made by Judge Treat in the controversy which was decided by him. That decision was again reached by Judge Brewer in the suit against the Grinnell Company, and I can therefore say with truth that up to this hour the claim on the part of Glidden that he was in fact the inventor of that individual element of the composite organization, the subject of the present patent, has never been successfully assailed, but has been declared to be the fact by the patent office in a proceeding to which I shall presently refer, and has been affirmed and re-affirmed after careful scrutiny, upon records which sought to impeach this claim, of many thousand printed pages each, in two important judicial circuits.

I need not pause to discuss at any length the question of infringement in this case. It is practically conceded. If it were not, an inspection of the defendants' wire and a comparison of the fence structure with that which is the subject of the Glidden patent, would demonstrate the fact of infringement. It is an immaterial circumstance that the barbs in the defendants' fence-wires are placed alternately upon the two fence-wires. The patent does not require that all the barbs should be placed upon the same wire as a characteristic or feature of the invention. Upon this point the patent is silent. All that is required

is that the transverse spur-wires should be coiled at their middle portions around one of the fence-wires, and that they should be clamped in position and in place by the fellow fence-wire intertwisted with the wire around which the barbs are coiled. All this is literally true of the defendants' structure. Every alternate barb is combined with a piece coiled around the same fence-wire, and the fellow locking or binding wire is intertwisted therewith. So that it is plain that even if the patent were limited to the arrangement of all the barbs upon the self-same wire, there would still be a manifest employment of the invention. But I repeat that the patent is not so limited, and manifestly it is an entirely immaterial circumstance which one of the two intertwisted wires is selected to receive the coiled barb, for the reason that the office which the binder wire performs in relation to the barb coiled upon the other wire of the intertwisted two wires is the same, whether all the barbs are coiled around one wire, or one-half of the barbs are coiled around one of the wires, and the other half coiled around the other of the wires; in either case the composite structure, which is the subject of the patent, is produced.

Nor do I attach the least importance to the question which has been raised relative to the degree of sharpness of the points of the barbs, as indicated by the drawings of the Glidden patent. The opinions of persons differ as to whether a barb for a fence-wire should have a sharp needle point, capable of easily entering the flesh of an animal, or whether it should have a point so blunt that while it effects a prick, it shall not be liable to cause a wound by entering an artery. Opinions on this point are divided, but the character of the fence is not changed by making the point sharp in one case and blunter in another. Glidden, in fourteen different instances in the specifications and claim, speaks of the transverse wires as spurs or spur-wires. Their character as such is not changed in kind by making them sharp or duller at their ends. Again, in all the controversies under the Glidden patent, there has never been any question as to the fact that such transverse wires were in fact spur-wires, and no such contention in the hearing before Judge Brewer received even a passing judicial notice.

Certain facts in relation to the procurement of the patents on the Glidden invention in barbed fences.

I desire now to clear up a certain confusion which is liable to exist in respect to the relation of the present Glidden patent in suit to another patent granted to Glidden under date of May 12, 1874, No. 150,683. The patent in this suit, No. 157,-124, dated November 24, 1874, is based upon the first invention on this subject made by Glidden. It so happens, however, that this earliest invention of Glidden is expressed in and covered by a patent later in date than the date of a subsequent, subordinate and inferior invention made by Glidden. This postponement in date was the result of the accident of circumstances.

Joseph F. Glidden, prior to the 27th of October, 1873, made the most important improvement in the construction of barbed fences which has been known to this now most extensive industry. He made application for a patent for his invention immediately, but, as in the case of a majority of the applications for patents, objection was made in the first instance by the examiner to the granting of the same in the terms of the claim in which the application was cast. While such application was pending in the office, Glidden made what he considered to be another invention in barbed fences, and made application for letters patent for this second improvement on the 14th of March, 1874, or about five months after the date of the application for the patent in this suit. This second improvement was necessarily subordinate to the invention which was the subject of his then pending prior application. It was an independent improvement by itself. In said second application he did indeed show a barb coiled between its ends, the same as shown in his first application ; but such barb was not combined with a single fence-wire and locked in place by an intertwisted wire. The improvement, which he described, consisted in coiling the barb around two fence-wires laid side by side; such barbs were not locked in place at all, but they

were prevented from moving longitudinally along the wires by the spreading of the fence-wires intermediate of the barbs apart, into the general form of an ellipse. In this improvement he also provided the fence with a slotted tube containing a coiled spring, the effect of which spring was to spread the wires apart and keep them at the proper tension under the varying conditions of heat and cold.

This latter application was rejected by the examiner upon reference to Haish's patent of January 20, 1874, which was an invention later than the Glidden invention in suit, but was prior to the second invention of Glidden expressed in the patent No. 150,683. In view of this fact it would become the duty of the patent office to declare an interference with Haish, and inasmuch as it was claimed that Glidden could not, in this second application, claim as of the essence of his invention, broadly "spurs or prongs," he entered a disclaimer which limited the subject of that patent within its proper boundaries. That disclaimer is in the words: "I do not claim to have or-"iginated the device known as spurs or prongs on the wires, "they having been used before, but confine myself to the "means for holding the spurs at proper intervals on the wires, "and to the means for attaining a uniform tension of the wires "as claimed."

This statement was true, because spurs or prongs, broadly, were not Glidden's invention. They were exhibited in the prior patents to Hunt, to Smith and to Kelly. They were also exhibited in his then pending application, filed October 27, 1873. The court will not give, we apprehend, the effect to this disclaimer which is urged by counsel for the defendants. It will be noticed that Glidden does not say that he is not the originator of spurs or prongs coiled between their ends; but that he is not the originator of devices known as spurs or prongs.

The position taken by the defendants is, as I understand it, that this passage occurring in a later application to the application for the patent in suit, is equivalent to a declaration by Glidden that somebody else than himself was the inventor of this peculiar and novel form of barb. This proposition goes

altogether too far. Nothing that could be contained in this second patent could affect a patent granted on a prior application. The disclaimer is to be read as if it said: "I do not "claim *in this application* to have originated," etc. He surely could not so claim in that application what was shown in his prior pending application. Again, another entirely proper and correct interpretation of the disclaimer is to understand that it is equivalent to the statement that he does not profess to be the inventor of devices broadly considered, and without regard to specific character, known as spurs or prongs, because, such, in fact, had been known for six years in the art, and were described in four different forms by his predecessors, Hunt, Smith and Kelly.

Finally, it is the duty of the court to construe the language used so as to be consistent with the truth, and with the proper necessities of the application in which the disclaimer occurs, and not to construe the words as an admission binding on Glidden that some unknown person invented or originated that form of barb which consists in coiling it between its ends.

The patent on the second application, limited to the combination of two wires with a slotted tube and compensation spring, was granted May 12, 1874, before a conclusion had been reached by the patent office upon the application first filed by him for the patent now in suit. He was still persisting in his demand for a patent for this first invention. He had been improperly rejected by the examiner upon the prior patent of Kelly, dated February 11, 1868. To this action his attorney made a proper reply, setting forth the function which the intertwisted fence-wire performed, and saying, which was the obvious truth, that he did not claim the invention of "prongs, *per se*, broadly;" because, indeed, such pricking instruments were already known to the art of barbed fencing. So persistent was Glidden in procuring his invention, that he changed his solicitor and filed, on the 20th of June, 1874, a new specification, the text of which is the same as the present specification of the patent, and the first claim of which was in the same words as the present claim of the patent. In fact, with the difference of phraseology merely, the subject of the

claim in the present patent is the same as the claim originally filed with his application. Thereupon the patent was allowed, but before it issued he met with another obstacle which is not of unusual occurrence. Jacob Haish filed an application on the 17th of June, 1874, for letters patent, and undertook to contest priority of invention with Glidden. An interference under the law was therefore declared, and upon this issue Glidden triumphed. Finally, after all embarrassments and delays, the letters patent now in suit were duly issued to him November 24, 1874.

Glidden, therefore, at this last named date, was in possession of two letters patent. In one of them, procured upon his first application, was the statement of invention to be "a twisted "fence-wire having a traverse spur-wire bent at its middle "portion about one of the wire strands of said fence-wire and "clamped in position and place by the other wire strand "upon its fellow." In the other of them the claim of invention was for "the combination of the wires *cb*, the slotted "tube *g*, coil spring *i* and post *k*, for keeping the wires in "proper tension in various temperatures."

In neither of these patents did he claim, as the subject of invention, simply a barb coiled between its ends as a feature characteristic of barb construction.

The Re-issue Proceedings.

I now come to the subject of the procuration by Glidden of a claim for the invention of this particular form of barb, which consists in coiling wire between its ends for application to a fence-wire for barbing purposes.

The statutes, Sec. 4,916 provide that "Whenever any patent "is inoperative or invalid by reason of a defective or insuffi-"cient specification, * * * if the error has arisen by acci-"dent, inadvertence or mistake, and without any fraudulent "or deceptive intention, the commissioner shall, on the sur-"render of such patent, * * * cause a new patent for the "same invention, and in accordance with the corrected speci-"fication, to be issued to the patentee."

Glidden had become advised that in neither of the patents which he held had he covered that particular subject of invention which resides in the manner of forming the barb. He accordingly applied for a re-issue of his patent 150,683, and claimed in such application to cover, "in combination with "a fence-wire, a barb formed of a short piece of pointed "wire, secured in place upon the fence-wire by coiling "between its ends, forming two projecting points." He surrendered such original patent, 150,683, because it happened to be the earlier of the patents in date which had been granted, because a rule of the patent office in such cases so required. The patent office thus had before it a direct assertion by Glidden that this feature of invention was original with him. It found nothing that could bar this claim, and his re-issue patent was duly issued to him under date of February 8, 1876; and thus I insist that this title to such invention was adjudicated in his favor by the patent office at that date for whatever that adjudication may be worth. It was of value at least to this extent, that there did not appear on record in the patent office any instance where a barb had been so constructed, and although barbs or pricking points were, broadly, well known as devices for protecting wire fences against intrusion from animals, and were shown in the prior patents of Hunt, Smith and Kelly, yet the judgment of the patent office was to the effect that a barb, formed by coiling a piece of wire at its middle portion between its ends and combining it with a fence-wire, was a patentable subject of invention, without regard to what devices or means were employed to fasten or lock such barb upon the fence-wire. This adjudication of the patent office is also important in this controversy in view of the fact that there has been an open and notorious claim to this invention on the part of Glidden since the issuance of said patent, now twelve years ago.

The First Suit in the Northern District of Illinois.

Suits were commenced against Jacob Haish and thirteen other parties manufacturing barbed fence-wire of various descriptions, who were charged with infringing the Hunt, the Kelly, the Glidden patent in suit and the re-issue Glidden patent. The case is reported in 4 Fed. Rep., 900. An earnest attempt was made to establish the allegation of the defense that the Glidden fence-wire had been previously known and used, and an immense mass of testimony, aggregating some three thousand printed pages, were taken, for the purpose of establishing that in various localities in Illinois, Iowa and Texas, the invention had been anticipated by actual fence constructions improvised or intelligently designed, upon farm properties. Among these fences relied upon was the Beers fence, which figures in the present case. All these attacks met with complete failure; the originality of the invention of Glidden was established.

Now, it is true that in this case Judges Drummond and Blodgett upheld the Glidden reissue based upon his second invention, and dated February 8, 1876. Your Honor understands that the law upon this subject was differently interpreted from what it has been since the review of the right of reissue by the Supreme Court in the case of *Miller* v. *The Bridgeport Brass Company*, decided in 1881. Under the former practice and view of the law, a reissue patent would be sustained provided there were indicated in the original drawings or specifications a subject of invention which might have been claimed by the inventor at the time that he made his application. And that portion of the statute which required that the reissue patents shall be for the same invention as the original, was invariably held to be satisfied in the event that the drawings of the subject patented exhibited fairly the feature sought to be claimed by the reissue, and without any regard to whether such feature were made the subject of any de-

scription or assertion of invention in the body of the specification.

Judges Drummond and Blodgett fully sustained the validity of the Glidden re-issue. (4 Fed. Rep., 913.) The court also fully upheld the validity of the Michael Kelly re-issue of February 11, 1868. (Page 912.) It also assigned to the Kelly invention "the idea of fixing the barb rigidly upon the wire "and holding it in place by another wire twisted upon it." (Page 913.) The necessary corollary from this conclusion, based upon the Court's view of the scope of the Kelly patent and the effect of the second wire as a locking device, was that it would require no invention to make the composite structure, consisting of a combination of the subject of the re-issue patent of Glidden with the subject of the re-issued Kelly patent.

The Decision of Judge Treat in the District of Missouri on the Kelly Re-Issue and the Glidden Re-Issue.

I am now brought to the subject of the review of the Glidden patent and of the Kelly patent, which was made by Judge Treat in the suit of these complainants against Fuchs. It will be remembered by your Honor that certain suits upon the same patents were pending in the Southern District of Iowa, and that a hearing had been had before Judge McCrary at Keokuk. Pending the decision it became known that the same subject would be brought on for argument before Judge Treat, in the district of Missouri, and therefore an arrangement was had, to suit the convenience of the Court and to prevent any conflict of decision, that Judge Treat's views on the subject should be ascertained before a decision should be rendered in the cases argued in Iowa.

Judge Treat, upon the question of the validity of the Kelly and Glidden re-issues, reached a conclusion directly opposite of that which had been reached by the Circuit Court for the Northern District of Illinois. He did not call in question at all the fact that Glidden might have been the original inventor of that method of making the barb, which resided in the

coiling of the wire between its ends and combining it in some way with the fence-wire; but he held that the Glidden re-issue was not warranted by the original patent, upon which it was based, and was not, in fact, within the meaning of the law, for the same invention set forth in the patent of May 12, 1874. In dealing with the Kelley re-issue he held that it was invalid in consequence of the long interval of time which had elapsed between the procurement of the original and the re-issued patent, and that it was obnoxious to the rule of law regarding the subject, as it had then been recently determined by the Supreme Court. He further held that the original Kelly patent did not warrant the view which the re-issue emphasized, to the effect that the second wire performed the office of locking the barbs in place.

Inasmuch as the necessary effect of Judge Treat's decision, which was concurred in by Judges McCrary and Love, of this circuit (note to p. 663, 16 Fed. Rep.), was to destroy the basis upon which Judges Drummond and Blodgett had failed to find invention in the Glidden patent of November 24, 1874, here in suit, it becomes necessary to consider the points of that decision with some care, especially for the controlling reason that in a subsequent suit against the Grinnell Wire Company, determined by Judge Brewer and reported in 24 Fed. Rep., 23, the present Glidden patent was sustained. Judge Treat found on an inspection of the original Kelly patent, that it "was for a combination by which a plate of iron or steel "was strung on a wire and fastened by a blow or compression, "so as to flatten the opening and fasten it to the wire."

The Court quoted the clause from the patent, in which it is said, "I can, where it is desirable to *increase the strength of the wire*, lay another wire of the same or different size, alongside of the thorn wire, and can twist the two together by any suitable mechanism. Figure 2 is referred to. It tends to insure a regularity in the distribution of the points in many different directions."

With this passage in the specification before him, as to the effect of the second wire shown in figure 2, he proceeds to consider the function which this secondary wire performs in

the organization. He finds that the original patent suggested only the twisting of the second wire as a means of strengthening the primary wire, and that the mode of fastening the barbs in place upon the wire, was in fact effected by flattening them so as to elongate the whole from a circle to an ellipse. He then refers to the re-issued patent, in which the function assigned to the second wire is that of holding the barbs in position, in disregard of the mechanical means, which consisted in flattening the holes in the barbs.

The alleged infringing wire in that case was a form of wire identical with the Glidden wire of the present patent in suit. It was a barb coiled at its middle portion about one of the fence-wires, and held in place and locked in position by a binder wire. The Court found that "the original "patent for the fixed barbed plates, made by hammering, or "otherwise, did not contemplate defendant's form of barb or "the use of a twisted wire to keep barbs in position. If, there- "fore, the re-issued patent, 6,902 (Kelly), is to be considered as "covering more than the mode of fastening the plate barbs to "the wire in the combination stated, and as extending the use "of the twisted wire, so as to include its use for the distribution "and locking of all kinds of barbs, then said re-issued patent is "invalid as to said extension, because it was not included with- "in the scope of the original invention. * * * "The result is that said re-issued patent is invalid, so far as the "same may be supposed to cover the use of a twisted wire to "*lock and keep barbs in position*. Also, that the defendant's "product, both as to the barb and the mode of fastening or "distributing the same, is entirely outside of the Kelly patent "or its re-issue."

The learned Judge repeatedly emphasizes his conclusion that there was nothing in the Kelly patent upon which to found the assertion that the second wire performed the function of locking the barb. He says (page 665): "In the original Kelly patent, the specifications of "which are above quoted, there is nothing to indicate the use of a second wire, *twisted for locking purposes*. * * * Hence the attempt in the Kelly re-issue to broaden the original patent; to cover what was not

included in or suggested by said original patent, more especially in the light of subsequent inventions and of his laches, renders the re-issue invalid. His re-issue was subsequent to the Glidden patents."

The Court then quotes that paragraph in the re-issue specification, wherein the corresponding paragraph above quoted from the original, relative to the function of the second wire as a locking device, is stated, and in which will be found the interpolation of the statement that this wire "locks the thorn." And the Court remarks that if the barb were already fixed in position by the operation of flattening it, this second wire could not accomplish a locking operation. From which I understand that he regarded the re-issue patent as an attempt to embrace that feature of fastening a *loose* barb upon the wire which consists in employing an intertwisted binding wire to perform that office, independently of any other device or means for so fastening the barb. He again emphasizes the absence in the Kelly patent of the thought that a binder wire could be used for locking purposes to secure an otherwise loose barb upon its wire, and thus dispense with any contrivance or manipulation for fastening it, in the passage, "there was no locking sug-"gested, nor, mechanically, could it be otherwise than useless "for locking purposes, inasmuch as the locking purposes had "been provided for by compression."

Passing then to the question of infringement, the Court says that it is contended that the Kelly re-issue covers any use of a second or twisting wire, by which the barb-plates or series of thorns can be held in position, distributively, along fence-wires, whether the thorns are perforated plates or short twisted wires in loops, and concludes (page 666): "It is evident that if the use of the "second wire was to *lock* the thorn without "the compression of the barb-plate, then an entirely new de-"vice had been inserted into the old combination. * * * "Hence the result of this examination is: *first*, the re-issued "patent is expanded, unlawfully, to cover what was not a part "of the original invention or combination; *second*, that inas-"much as the use of the second or twisted wire for *locking* "purposes, without compression or perforated barbed plates,

" had in the mean time been patented, or applied for ; and in-
" asmuch as there was no inadvertence, accident or mistake to
" be corrected, it is obvious that the re-issued Kelly patent is
" invalid. * * * It evidently was intended to cover sub-
" sequent inventions, and by expansion appropriate the in-
" ventions of others, thus coming within the denunciation by
" the Supreme Court."

Now, your Honor will observe that one of those subsequent inventions which Judge Treat holds it was the intention of the re-issued Kelly to unlawfully cover, was the very invention of Glidden in suit in this case, patented November 24, 1874, intermediate of the original and the re-issue Kelly patent.

I respectfully submit that I have demonstrated that the Circuit Court for the District of Missouri decided that the Kelly patent, as well as the Kelly invention, did not comprehend that improvement in making barb fencing, which consisted in fastening a barb loose upon the fence-wire by the aid of an inter-twisting locking wire, and no other device whatever. The conclusion was concurred in before it was announced by Judges McCrary and Love. It has since been concurred in and affirmed by Judge Brewer. It was a legitimate subject of invention to discover that a loose barb wire could be locked upon a fence-wire by an intertwisted fellow wire, and prevented from rotation in either direction. There are only two persons, as we insist, that could claim this subject. The one person was Kelly, the other person was Glidden. Two courts have finally decided that the invention did not belong to Kelly, but was undertaken to be appropriated by him after the invention of Glidden had been made public. We are bound by that conclusion. If the invention did not belong to Kelly it must belong to Glidden, so far as any patent for the same is concerned. He made known that subject of invention when he applied for his patent in 1873, and received a title to it November 24, 1874. That subject of invention, in view of the concurring decision of the Federal Courts in Missouri, and in this circuit, must be conclusive as to the validity of the Glidden patent, unless, indeed, it should turn

out to be anticipated by the alleged prior and once judicially condemned pretense of Beers.

Judge Treat, in his opinion, next proceeds to deal with the Glidden re-issue. He condemns this re-issue on the ground of want of identity in subject matter with the original patent upon which it is based, which related only to a compensation device for spreading two fence-wires asunder at points intermediate of the barbs applied to such two wires. He also condemns the re-issue on the ground that Glidden had procured the patent now in suit upon an application for such other patent prior to the application for the patent which was re-issued, and holds that it is a necessary implication that the two inventions were wholly different. (Page 667.) The court refers to the argument made by the complainants, that in determining the validity of the re-issued Glidden patent, it was competent to take into account the fact that Glidden was the holder of another patent based upon a previous application, in which prior patent a barb coiled between its ends was in fact shown. He remarks? ": It is obvious that the Glidden re-issue " 6,913, in itself, was altogether too broad to be sustained, un- " less it is permissible to go behind the original patent of May " 12, 1874, and help out the same by reference to an applica- " tion under which a later patent was issued."

The necessary inference is that if it were permissible to refer to such earlier application, subject to the present patent, the case might be made out.

The Court held in effect that the two patents to Glidden were for different and independent inventions, made at different times, and not divisional parts of a single invention, and inasmuch as the reissued patents to Glidden could not be eked out by reference to the invention covered by the patent of November 24th, 1874, the case must fail. The Court asserts in substance, that Glidden had a patent specifically for the very subject to which he was claiming the reissued patent to extend, in the passage, " It also appears that he was fully " aware of that fact, because he received the later patent of " November 24th, 1874, and now claims to expand his prior " patent of May 12th, to cover his later patent."

In the suit against Fuchs, the present Glidden patent of November 24th, 1874, was not declared on.

Finally, this conclusion is clear from the immediate context of the opinion, wherein Judge Treat quotes a paragraph from the decision of the Supreme Court in *Bates* v. *Coe*, 98 U. S., 48 (erroneously cited by Judge Treat, as 11 Wall., 516), and says that such paragraph quoted is the converse of the case under review. The passage quoted is as follows :

" Where the thing patented is an entirety, consisting of a " single device or combination of old elements incapable of " division or separate use, the respondent cannot escape the " charge of infringement by alleging or proving that a part " of the entire thing is found in one prior patent or printed " publication, or machine, and another part in another prior " exhibit, and still another part in a third one, and from the " three of any greater number of such exhibits draw the con- " clusion that the patentee is not the original and first inventor " of the patented improvement."

The application of this doctrine, as I understand it, is clearly this: The complainants were claiming, in the view of Judge Treat, that the reissued Glidden patent should be held sufficient to hold the defendants, who were making a style of wire identical with that which is illustrated in the Glidden patent of November 24th, 1874, No. 157,124, on the theory that the Court had a right to infuse into such reissued patent the invention set forth in the patent of November 24th, 1874, on the ground that such patent was based upon an application prior to the application of the patent on which the reissue was granted ; and that it was impossible under the law, to hold such defendants' manufacture to be an infringement of the reissued patent, because the subject of such reissued patent could not be broad enough to include that which had been secured as a specific combination of elements, such as the defendants did use in the independent patent to Glidden of November 24th, 1874.

The Proceedings before Judge Brewer in the Suit against the Grinnell Wire Company.

After the determination of the suits in Missouri, by the decision of Judge Treat, and the disposition of the pending suits in this circuit by Judges McCrary and Love, conformable with the opinion of Judge Treat, a new suit was commenced, based wholly upon the Glidden patent No. 157,124, of November 24, 1874. The defendants in that case were making wire which was substantially the wire described in the said Glidden patent. Barbs were coiled between their ends around one of the fence-wires, and were locked and held in place by a fellow wire intertwisted with the fence wire. In that case, necessarily, the validity of the Glidden patent, in view of the prior decision and of the prior art, was involved. The case was defended most fully by able counsel, upon an enormous record covering thousands of pages, in the effort to establish priority, and every question in the case which could be properly made was presented most elaborately and ably by Mr. Cummins, both in a printed brief and in oral argument. Judge Brewer sustained the patent, not only as against every objection that could be made to it as a legal document, but also as against all the prior structures which were set up in that case, which embraced the Delhi Fair and the Stone fence, two of the subjects appearing again in the present record.

So far as the old fences set up in that suit tried before Judge Brewer are concerned, his judgment was based, necessarily, upon the record made in that case. It is competent, beyond question, for the defendants to make a new record in this case, and to establish by other evidence the existence of the same fences which were condemned by Judge Brewer, or through other and distinct instances of anticipation. And this brings me to the proposition which I intimated at the outset of the discussion, as one upon which I should rely, and which is, that

The old Morley Fences, the Long Fence, the Chester D. Stone Fence and the Hutchinson Fence, if proved to have had a prior existence, do not overthrow the Glidden Patent in suit.

It is not pretended that any one of the above enumerated fences were anything more than instances of barbs coiled between their ends, applied to a single fence wire. In no case was the concrete organization that which is the subject of the patent in suit, the essence of which is that the fence construction shall consist of barbs coiled at their middle portion, and locked upon one of the fence-wires, and clamped in position and place by the other wire. It becomes necessary, in the discussion of this proposition, to examine a little more closely the specification of the said Glidden patent, than I have hitherto done. It is an instrument remarkably clear and precise. It sets forth the improvement which is afterwards recited fully in the claim, as consisting "in combining with the twisted "fence-wires, a short transverse wire, coiled or bent at its cen- "tral portion about one of the wire strands of the twist, with its "free ends projecting in opposite directions—the other wire "strand serving to bind the spur wire firmly to its place and "in position." It then proceeds to describe the fence-wire as "composed of at least two strands, which are designed to be "twisted together after the spur-wires have been arranged in "place."

As a necessary characteristic of this new and peculiar barb it is adapted to be applied to a fence-wire by being wrapped around it, or, if preferred, the barbs may be coiled separately, and then slipped over the wire strand, as was the method employed in making the Kelly wire. Now, whether such coiled barbs were wrapped around the wire by coiling, or whether they were coiled separately and then strung upon the wire as the specification contemplated, it was necessary to fix them firmly in position, and this

was accomplished, in the language of the specification, as follows:

"The spurs having thus been arranged upon one of the wire "strands, are fixed in position and place, by approaching the "other wire strand *z* on the side of the bend from which the "spurs extend, and then twisting the two strands *a z* together "by means of the wire key above mentioned, or otherwise. "This operation locks each spur-wire at its allotted place and "prevents it from moving therefrom in either direction. *It* "*clamps the bend of the spur-wire upon the wire a, thereby* "*holding it against rotary vibration.* Finally, the spur-ends "extend out between the strands on each side, and where the "wires are more closely approximated in the twist, form "shoulders or stops *s*, which effectually prevent such rotation "in either direction."

It becomes unnecessary for me to argue, in view of the judicial decisions upon the subject, that the Glidden patent exhibits a lawful subject of invention, notwithstanding anything shown in the prior art, including the prior patent to Michael Kelly. I am loath, however, to stand upon the mere judicial finding of a fact, no matter how binding it may be upon this Court. I desire, therefore, that there should be no impression in your Honor's mind to the effect that the prior Kelly patent only failed to deprive the Glidden patent of patentable quality, for the reason that Kelly actually fastened his barbs on a wire by flattening them. If your Honor should be of the opinion that this statement of Kelly as to the means by which he fixed his barbs on the wire were the sole reason why his patent failed to destroy the Glidden, there would be a failure, I think, to rightly appreciate the Glidden construction in comparison with that of Kelly.

If we should take a specimen of the Kelly wire, such as I now hold in my hand, in which the lozenge-shaped barbs have not been fastened to the wire upon which they are strung, by compression, and then, if intertwisted with such barbs were a fellow wire, it will be found that the barbs are not locked in place. They are indeed prevented from completely rotating

around the wire upon which they are strung by the presence of the intertwisted second wire, but they are in no sense locked in position. They can be moved through a considerable arc of a circle. If we examine a specimen of the Glidden wire, we find that the barbs are absolutely locked in position, as the patent states, and are incapable of rotating in either direction. This is the result of the happy co-relation between an intertwisted binding wire and a barb provided with a centrally-coiled hub. This new and useful combination was the invention of Glidden. It is immaterial that he did, in fact, invent a barb composed of a piece of wire coiled between its ends. He also invented that other and independent subject of invention, which consists in the combination with a barb of that character of an intertwisted locking wire.

It is unnecessary for me to enlarge upon the fact that experience has proved that the best form of barb fencing is that in which the barbs are absolutely fixed in place upon the fence-wire. In no other way, can a two-pointed barb be of any real efficiency for arming a fence-wire. If such barb is free to rotate upon a fence-wire, necessarily the points will be liable to stand in vertical planes, or at least would be as liable to stand in that position as in any other. Now a fence-wire to be efficiently armed must be provided with spurs which stand out from the wire in substantially horizontal planes, and they ought to be so firmly fixed as to be incapable of movement around the wire. In the Hunt patent the barb was in the form of the wheel of a horseman's spur, and was fitted to rotate around the wire, but, being circular in form, it always presented a pricking point in every direction. Such form of fence, although the first expression of the original invention of arming a fence-wire with spurs, has never gone into any general use, for obvious reasons.

Again, the next invention in order, that expressed in the patent of L. B. Smith, consisted of a wooden hub, provided with four radial pointed arms, projecting from the hub like the spokes of a wheel, and these were intended to rotate freely around the wire, and were in substance only another form of a

wheeled barb The next inventor in the order of time was Michael Kelly. He proposed to fix his barbs rigidly upon the fence-wire, and in the patent to which I have already referred, as well as in a subsequent patent granted to him November 17, 1868, he made special provision for rigidly fixing the barbs upon the wires. In one instance he compressed them as we have already seen. In the second instance he inserted them in holes or slots punctured in the fence-wire.

Finally the next in order of time was Glidden. He conceived the idea that a barb of a particular character, viz.: one formed by coiling the wire between its ends, so as to make a central hub, could be absolutely locked in place against rotation in either direction, by the employment of an interwisted binder wire. He thus dispensed with all manipulation or devices otherwise necessary, which Kelly in his patents employed, and produced a new article of manufacture. And this article of manufacture is a new one in the eye of the law, and in fact, without reference to the circumstance that the fence-wire upon which the barb was strung might be old; or a coiled barb might be old, or that intertwisted wires might be old. The invention resides in the *combination*, or bringing together of such elements, whether old or new, when individually consid-sidered.

The doctrine of the Supreme Court, as expressed in *Bates* v. *Coe*, *supra*, is directly in point: "Where the thing patented is "an entirety, consisting of a single device or combination of "old elements incapable of division or separate use, the re-"spondent cannot escape the charge of infringement by alleg-"ing or proving that a part of the entire thing is found in one "prior patent or printed publication, or machine, and another "part in another prior exhibit, and still another part in a third "one, and from the three or any greater number of such ex-"hibits draw the conclusion that the patentee is not the orig-"inal and first inventor of the patented improvement."

The patent in suit is strictly for an article of manufacture, or, as it is sometimes stated, for a product. Such product may be the outcome of a machine, or it may be produced by hand labor. It is not for a twisted fence-wire alone. It is not for

any and every form of barb, such for example as the Kelly punctured sheet metal barb of lozenge shape, strung upon one wire, and having a second wire intertwisted with the first wire, but the patent is for that invention which consists in the bringing together, as an entirety, certain elements which, when brought together, make a distinctive fence-wire from anything previously used, and having characteristics as follows: First, a fence-wire upon which a certain specified kind of barbs are strung, or to which wire they are applied. Second, a transverse barb or spur-wire bent at its middle portion around such fence-wire. Third, a second wire strand intertwisted with the other fence-wire, having the effect to clamp in position and place, so as to prevent the least rotation in either direction of the said barb so peculiarly constructed.

Let us assume now, for the sake of the argument alone, that prior to Glidden's invention there did exist, and was shown at the Delhi fair, a fence-wire with a number of barbs coiled about the same. Would that fact destroy the validity of the Glidden combination as expressed in the patent in suit? I respectfully insist it would not. I am assuming now, of course, that the Beers structure had no prior existence. The only argument that could be made under the facts which I have supposed would be, that the Glidden combination, although not specifically anticipated by any prior structure, does not exhibit a patentable quality for the reason that it would not require invention in view of the prior existence of the individual elements which compose his fence, to unite them in his combination, when he had before him the suggestion which the prior Kelly patent affords. My reply to this line of argument is that the Kelly patent does not afford any adequate suggestion that the binder wire would act, when put into co-relation with a barb coiled between its ends, any differently from the inefficient manner in which it would act when put into combination with a lozenge shaped sheet metal barb. It was not a self-evident fact that the new result in kind which comes from the Glidden combination, would necessarily result in case there was substituted a barb coiled between its ends, for the punctured lozenge shaped sheet metal barb. Thought, study and experiment were necessary in order to determine the fact.

The first person who made the Glidden combination would discover that a new and peculiar result in kind followed from the combination of a binder wire with the hub formed wire barb, different from what was evidenced by the combination of a similar wire with a lozenge shaped sheet metal barb. The efficiency of the Glidden wire evidences the new result. It is plain to the senses that a useful and valuable thing in wire fencing happens in the one case, and does not occur in the other. In the Kelly instance, the barb must be mechanically fastened to the wire by flattening it; otherwise it will not be rigid; because there is no abrupt shoulder or hub with which the binder wire can be interlocked. Thus it follows that he who did in fact first make the Glidden combination made the discovery that if a coiled barb was strung never so loosely upon a fence-wire, it was not necessary to flatten down the coil with a hammer to make the barbs rigid upon the wire, but that the simple intertwisting of a binder wire with the wire upon which the barbs were strung, would, in consequence of the peculiar combination thus effected, bring about the absolute locking of the barbs rigidly upon the fence-wire.

No text writer has ever yet been able to state by exact definition what constitutes an invention; no opinion of any court has succeeded in formulating a satisfactory statement. Nothing more definite can be given in the way of definition than the statement that an invention is a progress in the useful arts, from the known to the unknown. Various statements can be given of conditions of creation or of fact which prevent a given thing from being classed among the subjects, the production of which require the exercise of the inventive faculty. Here, unfortunately, the law is empirical. Whether in a given case an article of manufacture, or a machine, or a process, exhibits invention, depends largely upon the constitution of the mind of the tribunal before which the subject is brought. A capacity to appreciate an invention is like the capacity to appreciate a thought in literature, a sentiment in poetry, or a scene in a landscape. Necessarily in every case the question to be propounded, as in the present case, is, is the construction which is the subject of

the patent a new one in fact, and has it evidenced its novelty by a wide adoption and appreciation on the part of the public? If it be true in any case that a construction, although but a short degree removed from prior constructions, has superseded all that went before in the estimation of the public, then, almost irresistibly, the presumption is that the inventive faculty has been employed in its production, as distinguished from the mere work of the constructor.

Upon this branch of the law we are not without authority.

Said the late Judge SHEPLEY, in *Pearl* v. *Ocean Mills* (11 Off. Gaz., p. 2):

"No more difficult task is imposed upon the court in "patent cases than that of determining what constitutes in- "vention, and of drawing a line of distinction between the in- "ventor and constructor. The change from the old structure "to the new one may be one which one inventor would devise, "with the expenditure of but little thought and labor, and "another would fail to accomplish after long and patient "effort. It may be one which one whose mind is fertile "in invention will suggest almost instantaneously, when the "skillful hand of a constructor will fail to reach an apparently "simple result by a long and toilsome process of experiment."

The Supreme Court, and several of the Circuits, have recognized the doctrine that utility is suggestive of originality, and that in a doubtful case the fact of marked utility in a later subject is a factor sufficient to turn the scale in favor of invention.

Judge SHIPMAN said, in *Stanley Works* v. *Sargent*, 8 Blatch., 346:

"Utility is not an infallible test of originality. The patent "law requires a thing to be new as well as useful, in order to "entitle it to the protection of the statute. To be new in the "sense of the act, it must be the product of original thought "or inventive skill, and not a mere formal or mechanical

" change of what was old and well known ; but the effect " produced by the change is often an appropriate, though not " a controlling, consideration in determining the character of " the change itself."

Again, Judge SHEPLEY said, in *Isaacs* v. *Abrams* (14 Off. Gaz., 862) :

" A change in the form of a machine or instrument, though " slight, if it works a successful result, not before accomplished " in a similar way in the art to which it is applied, or in any " other, is patentable."

Again, Mr. Justice Blatchford, in the case of *Eppinger* v. *Richey* (14 Blatch., 307), adopted the language of the Supreme Court in *Smith* v. *The Goodyear Dental Vulcanite Company*, 93 U. S., 495, directly bearing upon this point.

The Supreme Court in that case quotes with approval the doctrine laid down by the great English text writer on the law of patents, Mr. Webster, and says when the utility is proved to exist in any degree, a sufficiency of invention to support the patent must be presumed. We do not say the single fact that the device has gone into general usé, and has displaced other devices which had previously been employed for analogous uses, shows in all cases that the later device involves a patentable invention. It may, however, always be considered, and when other facts leave the question in doubt, it is sufficient to turn the scale.

Finally, in a very recent case decided by the Supreme Court, *Loom Company* v. *Higgins*, 105 U. S., 591, Mr. Justice BRADLEY, speaking for the Court, says :

" But it is plain from the evidence, and from the very fact " that it was not sooner adopted and used, that it did not, for " years, occur in this light to even the most skilful persons. It " may have been under their very eyes. They may almost be " said to have stumbled over it ; but they certainly failed to " see it, to estimate its value, and to bring it into notice. Who " *was* the first to see it, to understand its value, to give it

"shape and form, to bring it into notice and urge its adoption, "is a question to which we will shortly give our attention. * " * * Now that it has succeeded, it may seem very plain "to any one that he could have done it as well. This is often " the case with inventions of the greatest merit. It may be "laid down as a general rule, though perhaps not an invariable " one, that if a new combination and arrangement of known " elements produce a new and beneficial result, never attained "before, it is evidence of invention. * * * (Page 592.) " And we think that the combination of elements by which " this was effected, even if those elements were separately " known before, was invention sufficient to form the basis of a "patent."

Judge SHIPMAN said, in *Clark* v. *Copeland*, 2 Fish., 227:

"With regard to the *degree* of mental labor and inventive "skill required in the work of invention, the law has no no nice " or rigid standard. There must be *some* inventive skill exer- " cised, but the *degree* of that skill is not material. It not in- "frequently happens in the progress of mechanical arts, that " the time arrives when the whole atmosphere of inventive " thought is quickened with the life of an approaching discov- " ery, that many lines of investigation and experiment converg- " ing for a long time toward the point, almost, but not quite, " reach it ; when at last, some mind, by a happy thought, sup- " plies some new element or instrument or mode of organiza- "tion, and instantly gives birth to the organized idea."

Said the late Mr. Justice NELSON, in *McCormick* v. *Seymour*, 3 Blatch., 213:

" It is exceedingly difficult to draw a line between what may "be regarded by the eye as a small improvement or invention, " and one of magnitude. Oftentimes, improvements and dis- " coveries most important in their consequences, and in their " beneficial effects on the business interests of a community, " are among the simplest ideas of the mind."

The learned judge then proceeded to illustrate this general statement by reference to the case of *Russell* v. *Cowley*, Web-

ster's Patent Cases, 467, where it was held to be a patentable improvement to weld iron tubes by employing grooved rollers alone, without using a central mandrel to support the tube, such as had been previously used in combination with grooved rollers, and remarks: "Now, to the eye, the change "in the instance referred to was exceedingly simple." * * * * "The getting rid of the mandrel from the bore of "the tube, in the operation of welding it, was so useful an "idea that it was held to constitute a patentable subject "under the English law, which is no broader than our own "statute, and, indeed, scarcely so broad."

Finally, I cannot better conclude my citations from the opinions of the best masters in the patent law than to quote the words of the late lamented Judge Shepley, in the case of *Pike* v. *Prov. & Worces. R. R.*, 1 Holmes, 445:

"This is the history of the art in relation to most of the "important discoveries and inventions of the present day. "The want which the discovery or invention is to supply is "first felt, and the genius of invention is aroused, and the "thoughts and efforts of inventors are directed in a particular "channel. When one achieves success, it not infrequently ap- "pears that prior inventors have been travelling in the same "path, and in the light of his success we look back with won- "der at the omission of those who started earlier in the race, "to take the last short step which separated them from the "goal. But it is the last step in the race of discovery or in- "vention that counts, and he who first crosses the dividing "line between experiment and success wins the prize over "those who, having started earlier in the race, are but a "single step behind at the goal."

I therefore conclude this branch of the discussion by respectfully submitting to your Honor that the Glidden invention in suit in this case is not anticipated, even though your Honor should be of the opinion that some one of the single wire fences furnished with coiled barbs set up by the defendants has been proved to have had existence prior to the year 1873.

The Glidden Patent is not defeated by any one or all of the old fences set up by the defendants, for the reason that each and all of them are abandoned experiments.

Under the law in relation to letters patent as it has been uniformly administered by the courts, no alleged prior subject of construction is held to defeat a living patent in case it appeared that such prior thing was in substance nothing more than a crude experiment, which never developed into a substantial fruit. It may happen that some person, prior to a patentee, did actually conceive the idea which distinguishes the patent. He may have gone so far as to make drawings or models, or even a machine, but in case he did not follow the subject up with reasonable diligence, but deserted it and left it to its fate, then it is impossible to subsequently, after a long period of time, resurrect such skeleton, clothe it with flesh and quicken it with life. The patent act itself recognizes the possibility that there may be two contestants to a claim for priority, and that one of them may have anticipated the other by a considerable time in the conception of the invention. One of the defenses, therefore, which is permitted under the second clause of section 4,920 of the statute is, that a defendant in a suit upon a patent may set up that the plaintiff has either surreptitiously or unjustly obtained the patent "for that which was in fact invented "ed by another who was using reasonable diligence in adapt- "ing and perfecting the same." If in a contest against a patent this defense is set up, as is not infrequently the case, it is supported by proof that some person prior to the patentee actually made the invention. If the proof goes to the extent of showing that the patentee surreptitiously acquired a knowledge of the subject from such prior party, then a defense is made out; but this seldom happens. It is competent to show that such other party did in fact previously make the invention in question; but if there be a failure to show that the patentee possessed any knowledge of such prior invention, then it be-

comes necessary, to make the defense of any value, to prove that the condition imposed by the statute has been complied with by such earlier inventor; and he must show that he was "using reasonable diligence in adapting and perfecting the "same."

Another cardinal principle of the law is that when an old structure is relied upon to defeat a patent the proof as to its actual existence in a complete and operative form, so as to fully anticipate, in all respects, the thing which is the subject of the patent, must be made out beyond all question. The burden of proof is wholly upon the person seeking to obtain the patent, and every doubt must be resolved against such party. No case, I apprehend, can be found reported in the books where a patent has been defeated, upon proof of the prior existence of the same thing, when it also appeared that such alleged prior machine or manufactured article has not survived so as to be presented to the court. I do not mean to be understood as saying that it is necessary that the prior thing should survive in a commercial sense, or be upon the market for sale; but I mean that the thing which is asserted to be an anticipation should survive as to its physical existence.

The case of *Coffin* v. *Ogden*, 18 Wall., 120, is an illustration. In that case only a single reversible door latch had been made by the party who was set up by the defendant as having done that which anticipated the patent in suit. There was not the least doubt, however, as to the existence of the structure. It was produced in court and proved by a host of witnesses. The law does require that there should not be the least doubt or uncertainty as to the existence in fact of the supposed prior structure. The courts will not trust to the loose recollection of witnesses after a considerable interval of time. It insists upon convincing proof that the supposed prior structure in fact existed, and if this is wanting, the court invariably relegates the matter, although it may be satisfied that something was done in the same direction as that which the patent covers, to the class of abandoned experiments.

Upon this subject the late Mr. Justice GRIER said in *Adams* v. *Jones*, 1 Fisher, 531 :

" Everything which we have said with regard to the New " York gate locks, got up to defeat the Sherwood patent, ap- " plies with double force to the rusty sample brought to our " notice from Birmingham. In both cases the defense amounts " to no more than this : that the persons who made those sup- " posed originals came so near the patented device, or machine, " that they might have discovered it if they had only thought of " it, or could have anticipated that at some future day it could " be converted to some useful, practical purpose for simplifying, " cheapening and improving an important article of our manu- " facture. It is only when some person, by labor and perse- " verance, has been successful in perfecting some valuable man- " ufacture, by ingenious improvements and labor-saving de- " vices that their patents are sought to be annulled by digging " up some useless, forgotten contrivances of unsuccessful ex- " periments."

Again, the Court said, in *Sayles* v. *Chicago & N. W. R. R.*, 4 Fish., 588 :

" It is the history of inventions that when different persons " are exploring or experimenting in the same field, many efforts " which ultimately turn out to be failures often come very " near to success, and when other efforts have proved success- " ful, these last should not be deprived of the results of success " simply because others have come near to them."

In *Ransom* v. *Mayor of New York*, 1 Fish., 270, Judge HALL instructed the jury on this precise point as follows :

" I am also required by the plaintiffs to charge : That an " unsuccessful experiment abandoned, although involving the " same idea or principle, will not invalidate a patent granted " to a subsequent inventor who has reduced the invention to " successful practice, and published it by obtaining letters pat- " ent. Much less will it invalidate letters patent granted to a " prior inventor who is also the first to present the invention in " a practical form. This, gentlemen, is undoubtedly the rule

" of law upon that subject. If a person has some vague idea " of the application of the principle which another party has " made available; if he makes numerous trials and long con- " tinued experiments; if those trials and experiments never " result in such a knowledge on his part as will enable " him to put in successful practice the idea of which he " has this vague and undefined notion, he has never become an " inventor in the sense of the patent law; he has never em- " bodied the principle so as to make it available for practical " use, and the party who embodies the principle and makes it " available for practical use is the party who is entitled to a " patent and to protection under the patent law. The case of " *Gayler* v. *Wilder*, referred to, is a case where the Supreme " Court has laid down the doctrine, perhaps, in terms applic- " able to this case."

Judge GILES said in *Singer* v. *Walmsley*, 1 Fish., 575:

" So I say in reference to this case, it does not matter how " many experiments have been tried by different inventors, if " they fail, if their experiments were never perfected, if they " were brought into use—and by that I do not mean general " use, but to perform the functions of the plaintiff's machine, " or any of the perfected machines of this day—if they rested " in experiment alone, they were not of such a character as to " deprive subsequent inventors of the benefit of their inven- " tions, if they brought them into use. The man who brings " his invention before the country, and into actual use, is the " one to be protected, for he is the one who confers a benefit " upon the country."

Judge Grier says, in the case last referred to: 'Yet when " genius and patient perseverance have at length succeeded in " spite of sneers and scoffs in perfecting some valuable inven- " tion or discovery, how seldom is it followed by reward. " Envy robs him of the honor, while speculators, swindlers and " pirates rob him of the profits; every unsuccessful experimenter " who did, or did not, come very near making the discovery, " now claims it. Every one who can invent an improvement, " or vary its form, claims a right to pirate the original dis-

"covery. We need not summon Morse, or Blanchard, or "Woodworth, to prove that this is the usual history of every "grand invention or discovery.'"

Judge BLATCHFORD says, in *Hall* v. *Bird*, 3 Fish., 600:

"Now, although the old machine in the present case was "constructed in 1852, and had been kept in the cellar of defen- "ant's father under the circumstances stated, and had been "occasionally used there, and although it had not bodily disap- "peared from view, yet its existence and use were not made "public; the knowledge and use of it did not exist in a manner "accessible to the public; it had been substantially abandoned "it had substantially passed away from the memory of those "who had used it, as is shown by the fact that when they "were called on to stretch the links of chain to a uniform "length—the purpose to which it is not shown that the de- "fendant's father ever applied the machine—it did not occur "to them to use the machine for the purpose until after they "had learned of the existence and use of the plaintiff's ma- "chine. The knowledge of the machine was therefore as "effectually lost as if it had never been constructed, and the "public could derive no benefit from the invention embodied "in it until such invention should be discovered by another "inventor. As it clearly appears that the plaintiff made his "invention by his own efforts, and without any knowledge of "the machine in the cellar of the defendant's father, he in- "vented an improvement which was then new and was at the "time unknown, because the old machine was recalled to the "memory of the defendant and his brother, and of the ma- "chinist who put it up, by the success of the plaintiff's ma- "chine."

Mr. Justice CLIFFORD, in speaking for the Supreme Court, in *Seymour* v. *Osborne*, 11 Wall., 552, says:

"Desertion of an invention, consisting of a machine never "patented, may be proved by showing that the inventor, after "he had constructed it, and before he reduced it to practice, "broke it up as something requiring more thought and experi-

" ment, and laid the parts aside as incomplete, provided it ap-
" pears those acts were done without any definite intention of re-
" suming his experiments, and of restoring the machine with a
" view to apply for letters patent. *Johnson* v. *Root*, 2 Clifford,
" 123; *Gayler* v. *Wilder et al.*, 10 Howard, 498; *Parkhurst*
" v. *Kinsman*, 1 Blatchford, 494; *White et al.* v. *Allen et al.*,
" 2 Clifford, 230."

Judge McKennan said in *Parham* v. *American Sewing Machine Co.*, 4 Fish., 477:

" Now, what was the operative merit of these machines in
" the estimation of their inventor, makers and various owners,
" as indicated by their conduct rather than by the less reliable
" guide of their opinions? At the time when they were made,
" the country had learned the great value of the sewing ma-
" chine, and inventive skill was stimulated to devise improve-
" ments in its mechanism, by which its effectiveness might be
" increased and popular favor attracted. Is it, then, within
" the range of probability that the proprietors of an invention,
" from which, if successful, large profits might flow, would so
" soon have cast it aside if the trial to which it was subjected
" had proved its practical utility? No further effort was made
" to test its merits, no patent was applied for, and it was only res-
" cued from entire oblivion for a reason in no wise importing its
" capability of successful and useful operation. While, therefore,
" there has been no satisfactory trial of the efficiency of these
" machines, and the persons interested in them have thus indi-
" cated so decided a judgment against their practical utility,
" we but enforce a logical sequence in assigning them to the
" category of unsuccessful and abandoned experiments.
" * * * The evidence must establish clearly the pri-
" ority of a completed and useful machine over the complain-
" ant's or it is unavailing—to doubt upon this point is to re-
" solve it in the negative."

Mr. Justice Swayne said, for the Supreme Court, in *Coffin* v. *Ogden*, *supra*, 5 O. G., 271:

" The invention or discovery relied upon as a defense, must
" have been complete and capable of producing the result

"sought to be accomplished, and thus must be shown by the "defendant. The burden of proof rests upon him, and every "reasonable doubt should be resolved against him. If the thing "were embryotic or inchoate; if it rested in speculation or "experiment; if the process pursued for its development had "failed to reach the point of consummation, it cannot fail to "defeat a patent founded upon a discovery or invention which "was completed; while in the other case there was only pro-"gress, however near that progress may have approximated to "the end in view. The law requires, not conjecture, but cer-"tainty. If the question relates to a machine, the conception "must have been clothed in substantial forms which demon-"strate at once its practical efficacy and utility. (*Reed* v. "*Cutter*, 1 Story's R., 590.) * * * Until his work *is done* "the inventor has given nothing to the public."

Mr. Justice BRADLEY says, in *Brown* v. *Guild*, 6 O. G., 395:

"If upon the whole of the evidence it appears that the "alleged prior invention or discovery was only an experiment, "and was never brought into actual use, but was abandoned "and never revived by the alleged inventor, the mere fact of "having unsuccessfully applied for a patent therefor cannot "take the case out of the category of unsuccessful experi-"ments."

Mr. Justice STRONG, for the Supreme Court, says in The Wood Paper Patent, 23 Wall. 594:

"It is freely admitted that the patent of an originator of a "complete and successful invention cannot be avoided by "proof of any number of incomplete and imperfect experi-"ments made by others at an earlier date. This is true, "though the experimenters may have had the idea of the in-"vention, and may have made partially successful efforts to "embody it in a practical form."

Judge NIXON, of the District of New Jersey, said in *La Baw* v. *Hawkins*, 6 O. G., 727:

"It is hardly necessary to refer to authority to show that "where an original inventor has perfected his improvement, "whereby he puts the public in possession of his invention "and has obtained his patent, its validity is not to be "assailed nor its value destroyed as was so well said in "*Hitchcock* v. *Tremain*, 9 Blatch., 550, by allowing in- "fringers and rival inventors to set up crude and unsuc- "cessful experiments as anticipating it; in describing "which dim recollections are stimulated, and the con- "sciences of witnesses strained in attempts to clothe with "living flesh what had always remained inert and useless "skeletons. Such cases as *Ransom* v. *The Mayor of* "*New York* (1 Fisher, 252): *Cahoon* v. *Ring* (*ibid*, "397); *Goodyear* v. *Day*, (2 Wall., Jr., 283) and *White* v. "*Allen* (5 Fisher, 453), exhibit the well-settled law on this "subject."

Judge LONGYEAR pertinently says in *Hawes* v. *Antisdel*, 8 O. G., 685:

"In order to defeat a patent on the ground of want of novel- "ty, the proof of prior use or previous knowledge must be "such as to establish the fact clearly and satisfactorily and be- "yond reasonable doubt.

"Where the proofs are contradictory *mere* preponderance is "not sufficient to sustain the allegation. The preponderance "in such case must be such as to remove all reasonable doubt." * * * "To doubt in such a case is to solve the question in "the negative."

Judge DYER said, in *Gottfried* v. *Phillip*, 17 O. G., 681:

"It is so easy after a new and useful invention has come "into existence and been brought into public use, especially if "a characteristic of such invention is simplicity, for persons to "come forward with claims that they invented the same thing "many years before, and should therefore be esteemed the "real and original inventors, that the court should require con-

"vincing proof of the merit of such claims before overturning "the patent, especially so when it appears that the alleged "earlier inventor has not apparently regarded his supposed in- "vention of sufficient importance to push it upon public notice, "or to apply for a patent which would protect him in its ex- "clusive use."

These citations from the opinions of the court, where similar qpestions have arisen, could be multiplied almost indefinitely. The only question then is in the application of this settled law whether the alleged anticipating things set up fall in fact within the category of unsuccesssul experiments. In this connection it must strike the Court with great force that not a single well authenticated specimen of such supposed prior fences out of the ten different fences upon which proof has been taken by the defendants, has been produced save only that fence which is said to have been constructed before 1873 by W. H. Long, and to which fence the specific reply is made that it did not come into existence until 1875.

I cannot, manifestly, within the compass of a closing argument, review the history of each one of these fences. I must rest for that discussion upon the abstract of the testimony which has been prepared, and upon the opening argument submitted by my associate. I respectfully submit, that if your Honor should be of the opinion that something must have been done in the direction of wire fencing by old Mr. Morley, and something by Chester D. Stone, and something by Hutchinson, and something by Beers, the proof is insufficient to make out anything more than what the courts have called a crude experiment, resulting in nothing useful to the world, abandoned for years, and only revived for some purpose in defeating a useful invention, under which 40,000 tons of fencewire are now annually produced, and which has been vindicated as the property of Glidden by the concurrent action of the patent office, a general recognition by the public through a long series of years, and by the affirmation of the Circuit Conrt for this district.

Every one of the prior fences set up by the Defendants has been overthrown.

I do not propose to enter upon a general discussion of this subject. The material is before your Honor in the form of abstracts of testimony, presented by both parties to enable a conclusion to be reached. There are only certain general facts, which I desire to suggest as proper to be kept in mind in reviewing the mass of testimony bearing upon this subject.

It is a significant fact which cannot be overlooked, that the now supposed Morley construction played its part in the record of the case heard by Judge Brewer. It then appeared under the name of the Delhi Fair fence without paternity. Judge Brewer comments upon the want of proof touching its origin, and the absence of proof that anything subsequently came from it to add to the sum of human knowledge. An attempt has been made to supply these glaring deficiencies in the present case, and we now have five different specimens of fence like that which was attempted to be proven before Judge Brewer, the origin of which is all referred to one Morley, who has long been in his grave, who was eccentric in life, was afflicted with an unbalanced mind, was twice adjudged a lunatic, and died in a mad-house.

It would seem to be an easy matter, if this story were true, to produce some specimen of the Morley fence-wire from some one of the four different places, separate and distinct from each other, where he is said to have put barbed wire consisting of a single strand with barbs coiled around the same, into practical use for fencing purposes. Your Honor will not forget that the testimony in support of these fences is contradictory in its character, as it comes from the witnesses who profess to support the claim.

If old Mr. Morley did not in fact make the exhibition at the Delhi fair in 1859 or 1860, which is attributed to him, then every one of the four instances attributed to him must fall of necessity; or else indeed the fences in question remain as they were before Judge Brewer, without a father. It is not my

purpose to use harsh terms concerning the bulk of the witnesses who have testified in support of the Morley or the other fences. Their testimony, in the main, undoubtedly is in accord with what they supposed to be a fact, but we must not forget that the period concerning which they speak is more than a quarter of a century in the past. The memory plays strange freaks with men, and nothing is more common than to associate the past with the present, and to confound that which is of every-day experience with something that the memory indistinctly calls up as having been seen years before. I do not know, personally, a single one of the witnesses who have testified on the subject of these old fences; but I assert that every one of them, and there are many who are of good name and report in the communities in which they live, will be found to have testified with great indistinctness upon the subject of which they speak, and with none of that certainty and assurance which the court requires when a patent is to be defeated by an event which happened years before. Take for example the testimony of Judge Bailey. Undoubtedly his statement is in accord with his general impressions, and yet it cannot be true in fact. The year of which he speaks is the year 1859. It becomes necessary that the fence which he saw at the fair should have been exhibited by somebody as a new construction, and that exhibitor, although Judge Bailey does not mention him, must have been Morley, otherwise the testimony of the defendants is wholly irreconcilable. Now, it is absolutely certain that Morley was not able to be present at the Delhi fair in 1859. He was prostrated with a severe sickness. This is proved by the diary of his son, upon the correctness of which no doubt is thrown, and by the testimony of his attending physician.

An effort has been made to produce a specimen of the Morley fence. It comes now from the relic box of Stephen Potter, whose testimony as to the construction of the fence for the purposes of exhibition at the fair is in hopeless conflict with that of the witness Bates on the same subject. It is, of course, not impossible that Potter treasured this specimen of a barb fence as a precious keepsake, entitled to the same care that his father's testament and his grandfather's spectacles receive, but

the story is not a probable one, and it is not rendered any more likely in view of the fact that barb fencing, in a much more sightly form, has been in common and public use all over the country since 1875; and it is further improbable that Potter, who must have known of the prior controversy on this subject, should have kept his knowledge away from the parties who were defending the suit against the Grinnell company. It did not require much invention to locate this specimen for a quarter of a century or more in the relic box. A similar romance occurred when the Beers fence first appeared as a prior subject of invention. I shall not comment upon the direct testimony which the complainants have produced from every surviving member of old Mr. Morley's family. All this, together with the testimony which overthrows the pretense that fences of the same character were placed upon Morley's cow-pen, Morley's farm, and at his old mill, is set forth fully in the abstract of testimony which we have submitted, and has been exhaustively commented upon by my associate in this cause.

The William H. Long fence is overthrown by the proof that the complainants are able to show from the lumber dealer who furnished the fence boards for this supposed fence, that the car load of lumber for such purpose was not shipped to him until January, 1875. Mr. Long appeared afterwards as a witness for the defendant to rebut a small matter. It was in his power, better than that of any other man living, to show that the car load of lumber so sent to him in 1875, did not go into this fence, and to have satisfied the Court to what uses it was, in fact, put. It is not such an any every-day affair for Mr. Long to receive a carload of lumber that there is any reason for confusing in his mind the uses to which any particular quantity of lumber was put.

The Chester D. Stone fence appeared in the case before Judge Brewer. The claim of priority was condemned on the proof in that case, and Stone himself did not escape the caustic satire of the Court. It is noticeable that in this case he undertakes to give an entirely different account of the reason why he put up the fence from that which he gave before Judge

Brewer, and which called out from the Court a criticism. The existence of this fence depends upon the effect of the weight of testimony, and I shall rely, therefore, upon a comparison of the statements, the characters and the means of knowledge of the witnesses as they shall appear to your Honor upon investigation.

The Hutchinson fence is overthrown by the positive proof that the barbs which entered into its construction, as well as the tools which were used in placing the barbs upon the wire, were obtained from a hardware dealer at a date long after the invention of Glidden, and when barbs and tools for the construction of fences were in common use and on sale by hardware dealers throughout this region. A suggestion has been made that staples were easily procurable long before the period of time when we proved by Mr. Butler they were purchased by Hutchinson. True, indeed, staples for fastening plain fence-wires to posts have for very many years been in use, but such staples were not the kind of staples which were sold to Hutchinson. Hutchinson staples were of a lighter number of wire, and differently fashioned at their points for barbing purposes than were the common staples for securing plain fence-wire to posts, previously known.

There only remains the Beers fence. No pretended specimen of this fence was offered by the defendants. The complainants were, however, aware of the fact that in the suit in the Northern district of Illinois, in 1880, an attempt had been made to prove that E. A. Beers, a boy of fifteen years of age, had in fact put barbs upon wire, and intertwisted with such wires, for locking purposes, a second wire. The complainants overthrew that pretense eight years ago, not only by the direct proof, such as they have adduced in the present record, but also by the proof which they submitted touching the material of which this supposed specimen which had been preserved among relics, was made. They therefore insisted, against the earnest protest of the defendants, in verifying the specimen as the same specimen which had figured in the suit against Haish. Our reply to this attempt again to set up this defense, which

is supported by no witness who did not appear in the suit against Haish, is first, that the fence specimen shows on its face that it was not and could not well be the product of a farm boy just entering his teens. It bears the mark of having been constructed by mechanical means, with tools adapted to make a regular and orderly barb fence. It could not have been produced with the tools which Beers claims he used. Second, the material of which the fence is composed is of a variety of steel which did not come into use until after the Glidden invention. The fence-wire carries with it in the cold-shut most convincing evidence of the lateness of its origin. Third, the defense failed before Judges Drummond and Blodgett, though supported by the same witnesses who have testified for the defendants in this case, and by many others who have not been called by the defendants. Fourth, it is overthrown by the testimony which the complainants have adduced, coming from persons whose means of knowledge of the fact are fully as great as the knowledge of any of the witnesses who have testified in its support. Fifth, it appears that the pretended originator of it acquired a license under the Glidden patent to manufacture barb fencing, after the decision of the Haish case in which his claim to priority was overthrown. Sixth, it is at best an abandoned experiment.

In view of the suggestion of your Honor, I do not feel called upon to offer any argument in reply to the objection that has been taken to the validity of the Glidden patent, based upon certain matters disclosed by the contents of the file wrapper of the proceedings before the patent office on the application for the patent. It will be found that the claim originally presented was in substance the same as the present claim of the patent. It is immaterial what occurred in the course of the prosecution of the demand for the patent. The instrument, as it finally issued under the seal of the government, determines its character. The presumption in its favor on the ground of its regular issuance are concluded by the presence of the seal

of the granting officer, and by the recitations in the patent. The law upon this subject has been fully considered in

Hoe v. *Cottrell*, 17 Blatch., 547.
Hoe v. *Kahler*, 20 Blatch., 432.
Hoe v. *Kahler*, 23 Blatch., 354.

Having thus reviewed all the issues which are material for the decision of this cause, and presented the views of the complainants thereon, I submit, on their behalf, the decision of the controversy to the independent and fearless judgment of a Federal court of the United States.

BENJ. F. THURSTON.

Office Supreme Court U. S.
FILED,
DEC 2 1891
JAMES H. MCKENNEY,
CLERK.

DEFENDANT'S ARGUMENT.

SUPREME COURT OF THE UNITED STATES.

OCTOBER TERM, 1891.

No. 128.

THE WASHBURN & MOEN MANUFACTURING COMPANY and ISAAC L. ELLWOOD, Appellants,

vs.

THE BEAT 'EM ALL BARBED WIRE COMPANY, Salmon Thompson, William E. Farrell, Egbert Hoag and Abram Hoag, Appellees.

With which is Consolidated No. 129, same Complainants Appellants,

vs.

W. W. NORWOOD, Appellee,

With which is also Consolidated No. 130, same Complainants Appellants,

vs.

JOHN D. WILER and D. WILER, Appellees.

APPEAL FROM THE CIRCUIT COURT OF THE UNITED STATES FOR THE NORTHERN DISTRICT OF IOWA.

A. S. BLAIR, Attorney for The Beat 'Em All Barb Wire Co.—Salmon Thompson, William E. Farrell, W. W. Norwood, John D. Wiler and D. Wiler, of firm of Wiler Brothers, Appellees.

of the granting officer, and by the recitations in the patent. The law upon this subject has been fully considered in

Hoe v. *Cottrell*, 17 Blatch., 547.
Hoe v. *Kahler*, 20 Blatch., 432.
Hoe v. *Kahler*, 23 Blatch., 354.

Having thus reviewed all the issues which are material for the decision of this cause, and presented the views of the complainants thereon, I submit, on their behalf, the decision of the controversy to the independent and fearless judgment of a Federal court of the United States.

BENJ. F. THURSTON.

Office Supreme Court U. S.
FILED,
DEC 2 1891
JAMES H. MCKENNEY,
CLERK.

DEFENDANT'S ARGUMENT.

SUPREME COURT OF THE UNITED STATES.

OCTOBER TERM, 1891.

No. 128.

THE WASHBURN & MOEN MANUFACTURING COMPANY and ISAAC L. ELLWOOD, Appellants,

vs.

THE BEAT 'EM ALL BARBED WIRE COMPANY, Salmon Thompson, William E. Farrell, Egbert Hoag and Abram Hoag, Appellees.

With which is Consolidated No. 129, same Complainants Appellants,

vs.

W. W. NORWOOD, Appellee,

With which is also Consolidated No. 130, same Complainants Appellants,

vs.

JOHN D. WILER and D. WILER, Appellees.

APPEAL FROM THE CIRCUIT COURT OF THE UNITED STATES FOR THE NORTHERN DISTRICT OF IOWA.

A. S. BLAIR, Attorney for The Beat 'Em All Barb Wire Co.—Salmon Thompson, William E. Farrell, W. W. Norwood, John D. Wiler and D. Wiler, of firm of Wiler Brothers, Appellees.

DEFENDANT'S ARGUMENT.

SUPREME COURT OF THE UNITED STATES.

OCTOBER TERM, 1891.

No. 128.

THE WASHBURN & MOEN MANUFACTURING COMPANY and ISAAC L. ELLWOOD, Appellants,

vs.

THE BEAT 'EM ALL BARBED WIRE COMPANY, Salmon Thompson, William E. Farrell, Egbert Hoag and Abram Hoag, Appellees.

With which is Consolidated No. 129, same Complainants Appellants,

vs.

W. W. NORWOOD, Appellee,

With which is also Consolidated No. 130, same Complainants Appellants,

vs.

JOHN D. WILER and D. WILER, Appellees.

APPEAL FROM THE CIRCUIT COURT OF THE UNITED STATES FOR THE NORTHERN DISTRICT OF IOWA.

A. S. BLAIR, Attorney for The Beat 'Em All Barb Wire Co.—Salmon Thompson, William E. Farrell, W. W. Norwood, John D. Wiler and D. Wiler, of firm of Wiler Brothers, Appellees.

I

STATEMENT OF ISSUES.

This is an appeal from a final decree of the Circuit Court of the United States, for the Northern District of Iowa, in each of the three cases named in the title.

The decree held that the Joseph F. Glidden patent, No. 157,124, issued November 24, 1874, was invalid.

The complaint, in each case, is in the usual form, a suit on said patent, for an alleged infringement of it by the defendants in each case. The complaints will be found in full in the Record. In 128, (Rec. 1 to 16;) in 129, (Rec. 1 to 7;) in 130, (Rec. 1 to 7.)

To the complaints in each case there was filed an

ANSWER.

We will not set out the answers in full, as they are too extended, but give only a synopsis of one, as each are alike.

1. A denial, on information and belief, that said Joseph F. Glidden was the first inventor of the device claimed in his letters patent, No. 157,124.

2. That in view of the state of the Art, at the time of application for and granting of said letters patent, 157,124, there was no invention in the device described and claimed therein.

3. That said Joseph F. Glidden was not the first and original inventor of said device described in said letters patent, No. 157,124, for that the substantial parts thereof had been shown and described in the following patents:

William D. Hunt, July 23, 1867, No. 671,117;
Michael Kelly, February 11, 1868, No. 74,379;
Joseph F. Glidden, May 12, 1874, No. 150,683;
Lucien B. Smith, June 25, 1867, No. 66,182;

Michael Kelly, November 17, 1868, No. 84,062;
George W. Otis, July 21, 1868, No. 80,205;
Louis J. Hawley, February 6, 1868, No. 52,411;
Byron Boardman, March 30, 1858, No. 19,747;
Michael Kelly, November 17, 1868, No 84,062;
Elias C. Patterson, July 14, 1868, No. 79,854;
Zepheniah Knapp, October 24, 1848, No. 5,884;
Lucius Leavenworth, October 30, 1849, No. 6,831;
James Moore, June 30, 1857, No 17,692;
Isaac Knapp, June 7, 1864, No. 43,032;
H. B. Myers, November 27, 1864, No. 45,298;
W. H. Merryweather, November 8, 1853, No. 10 211;
Mathew Walker et al., March 29, 1853, No. 9,642.

4. That the same, and all substantial parts thereof, had long been known and used in the following places, naming them, the parties and witnesses, their residence, etc., but which we will here only name as fences, some of which the use and knowledge of we have set up by way of amendment to our answer, viz:

The Delhi Fair Fence, in Delhi, Delaware county, Iowa;
The Morley Farm Fences, in Delaware township, said Co.;
The Henry Hutchinson Fence, in Milo township, said Co.;
The W. H. Long Fence, in Oneida township, said Co.;
The Chas. Beers Fences, in Mayfield township, De Kalb county, Illinois, and others.

5. The denial of infringement.

Other formal defenses are set up in said answers, but as the foregoing are the main ones, we refer the Court to the balance in our answers and amendments thereto, to be found in the Record, viz: In No. 128, (Rec. 19 to 29;) in No. 129, (Rec. 9 to 12;) and in No. 130, (Rec. 10 to 17.) Their great length would make this statement cumbersome to set them out in full, and we believe it unnecessary.

No errors have been assigned by the complainants in these cases, and no printed argument served on us, but as we are desirous of the case being disposed of when reached in its course, we venture to present our side of the case.

ARGUMENT AND BRIEF

FOR ABOVE NAMED DEFENDANTS.

This is an appeal from an action begun by complainants, in the first instance, against the Beat 'Em All Barb Wire Co., *et al.*, for an alleged infringement of Letters Patent, No. 157,-124, issued to Joseph F. Glidden, alleging that said defendants are and were manufacturing and selling a barb wire similar to that of said Glidden patent, and are therefore infringers of said patent. And afterwards said suit 129, was brought against said defendant, W. W. Norwood, for selling the wire manufactured by said Beat 'Em All Barb Wire Company, and also afterwards, same kind of a suit brought against said defendants, John D. Wiler and D. Wiler, No. 130, for selling same wire.

On motion made in said Circuit Court, said case against said W. W. Norwood being there numbered 138, and said case against John D. Wiler and D. Wiler being there numbered 141, were for the purposes of the trial and decree consolidated with said first named case, the Beat 'Em All Barb Wire Company, No. 119, the order for said consolidation is found in the Record of the Norwood case, on p. 14, and in the Wiler Record p. 15.

As all the testimony—except to make out a *prima facie* case in the last two cases, viz: that against W. W. Norwood and the one against John D. Wiler—is in the Record in the Beat 'Em All Barbed Wire case, our references to evidence and exhibits in this argument will be to the Record in that case. No argument for complainants has been filed or served on us yet, in this case, but as the case was set for trial, we now file our argument and anticipate theirs.

The Joseph F. Glidden Patent, No. 157,124, sued on, expires on the 24th of this November.

Complainants claim to be the owners of it by assignment from the patentee.

The issuing of the patent and the assignment to complainants is admitted, leaving only the question of the validity of the Glidden Patent, and if valid then the infringement by defendants, to be determined by this Court. Under the issues herein, various questions are involved, going to the validity of the patent; viz: The state of the Art prior to the pretended invention; the novelty of it, whether or not the said Joseph F. Glidden was in fact the first and original inventor of the claimed new and useful invention and improvement in barbed wire fencing; whether useful or not; whether known or in use prior to his pretended claim; whether or not made, and on sale more than two years prior to the application; whether or not defendants are manufacturing the same wire, or substantially the same, besides many other questions which incidentally arise under the issues.

I.

STATE OF THE ART.

One of the most pertinent enquiries in the case is, what was the state of the Art touching the question of barbed wire for fencing purposes at the time this man, Glidden, entered the field as an inventor on this subject? Fencing of some kind for the purpose of confining or turning stock, had been known for ages. In connection therewith, spikes, nails, stone, and even broken glass for years had been employed, both in England and this country, by placing them on rails or on the top of fences and stone walls, to make them more effective in turning stock, and to prevent the intrusion of poachers into gardens and orchards; buck-thorn hedges in England, and osage orange here had been used. All of these had the same use as the present barbs on fence wire. Next comes the picket fence, having sharpened ends at the top for the same purpose; and so long and old is the use of these, that I doubt if a patent on the point of a picket can be found in America.

On the picket and point, in connection with other combinations, making a new device, there are scores of patents is-

sued in the United States; we have set out some of them in our answer, and on the trial introduced the patents in evidence. The Leavenworth patent, 6,831, of date October 30th, 1849, (Record 1989—1991.)

This shows the eye made of wire—being rings in the wire strand into which the wooden pickets are inserted, the sharp point of picket at top—answering to the barb on barbed wire. The wire being wound around the picket instead of the barbs being wound around the wire strand, as in barbed wire fences.

In connection with these same picket fences comes in again the wire as a part of the device, which acts the part of a bar or rail, to hold the picket, or barb, keep it in its place, and the point of the picket in position for effectiveness, (shown in the Moore patent, No. 17,692, June 30th, 1857, (Record 1988–1989). In this, two wires appear *twisted* together to form a rail, and in the twist an eye is formed to receive and hold the picket, suggesting to all the idea of a twisted wire cable for a fence, into which is fastened the barb or picket.

Prior to this comes the all wire fence, (except posts) that is, the rails are of wire; see Z. Knapp, patent No. 5,884, October 24th, 1848, (Record 1991–1992): also I. Knapp, patent No. 43,052, June 7th, 1864, and H. B. Myers, No. 45,298, November 29, 1864, (Record 2007). In these five patents we have the idea of sharp points, (pickets), for effectiveness, wires for strands, or rails, eyes, rings and loops in wire to hold the pickets and all wire fence (except posts).

The idea of twisting sharp pointed wire on rods or wire is suggested by the L. J. Hawley patent, No. 52,411, February 6th, 1866, (Record 2006–2007,) where we find on a lightning rod, a wire twisted around the rod with two sharp points sticking out, to make the rod more effective; although the purpose is different, the thought is the same as attaching wire barbs to wire fencing. The changing the use of a thing is not patentable; for instance, to turn the use of a coffee mill to grinding

peas, or a wool carder to carding cotton. Nor is the changing the use of the sharp pointed wire coiled around a lightning rod, from attracting electricity, to turning stock, when attached to a wire fence.

Advancing a little further, we find a complete barbed wire fence in the patent of Wm. D. Hunt, No. 67,117, July 23d, 1867, (Record 2003). Although not a wire barb, it is of metal, and attached to a wire fence, and serves the purpose, and is the first real barbed fence wire patented.

We find, however, that the pointed wire is used as a barb in the Lucien B. Smith patent, No. 66,182, June 28th, 1867, (Record 2004).

Instead of forming the hub by coiling the wire around the cable the hub is formed with a spool of wood. This wooden hub serves as an eye the same as in the Glidden barb; the only difference between the two is the material of which they are made, and the manner of making them.

In the case of complainants vs. Jacob Haish, 4 Fed. Rep. 900, Judge Blodgett holds that there is no invention in this Smith patent because of the anticipation by the said William D. Hunt in his patent on the subject matter, but whether valid or not, it is a publication to the world of the particular device, and is a part of the Art of barbed wire making.

Next in order comes the Michael Kelly patent, No. 74,379, dated February 11th, 1868, (Record 2000), which contains every combination and every essential element found in the Glidden patent sued on in this case. This Kelly wire is made by placing a sharp pointed barb at intervals on *one* wire, and twisting another (unbarbed) wire with it, forming the cable of the completed barbed wire fencing. This style of wire is in use to-day, and large quantities of it have been manufactured, and according to the testimony of complainants' witness, A. K. Stiles, late President of that corporation, The Thorn Wire Hedge Company, of Chicago,, has made of it, about 3,000 tons annually for the last six years or more. See his testimony, (Record 401), he testifies:

"Have been engaged in manufacturing barbed fence wire "for twelve years under the name of Thorn Wire Hedge "Company, and as Stiles & Calkins; was president of the corporation from its organization up to 1884; was manufactur- "ing the Kelly barbed wire, (Record 401), under the Kelly "patent, No. 74,379, February 11, 1868, and reissue No. 6902, "February 8, 1876, (Record 403); have manufactured no "other kind of wire; the Thorn Wire Hedge Company are "licensees of complainants; am now interested in manufactur- "ing the same wire under name of Stiles & Calkins; Mr. Cal- "kins is now president of the Thorn Wire Hedge Company; "I should think that for the eight or nine years I was presi- "dent of the company we manufactured about 185,000 tons "of barbed wire, and for the last two years about 3,000 tons "per year."

The next patent in order on this same subject is that of Michael Kelly, No. 84,062, November 17, 1868, (Record 1998). It is from the same inventor as the other Kelly patent named. Here is shown a wire barb, the point cut diagonally, but instead of making the eye in the barb, the eye is made in the fence wire and the barb is thrust in and having a flattened place at its middle, is held in place by compression of the main wire at the perforation. These two Kelly wires show pointed barbs, the one cut from flat sheet metal, the point made sharp by cutting the strip diagonally and the other of a wire barb, the sharp point made by cutting in the same manner, the only difference in the mode of attachment to the main wire being that in one, the eye is in the barb, and the other in the wire, but both performing the same function. We have in these two patents, the wire barb, sharp pointed metal barb, the eye in the barb and the two wires twisted together forming the cable, the twisted cable wire with sharp pointed barbs being the style finally adopted by the barbed wire manufacturers in this country. These patents on barbed fence wire before named, had been issued and were before the pub-

lic, some six years before Joseph F. Glidden entered the field as an inventor of barbed wire for fencing purposes.

By complainants it is claimed that Glidden conceived his idea of his final style of fence wire about the 27th of October, 1873. This we do not concede, but if true, then the Hunt, Smith and Kelly patents before mentioned, together with the inventions shown in the earlier fence patents, as seen in our exhibits of various patents on fences, lightning rods, and blind slat staples, informed Mr. Glidden of every principal element or thing involved in his patent sued on in this case.

In the case before referred to of these complainants against Jacob Haish in U. S. Circuit Court, Northern District of Ills., the Court holds that this Glidden patent—157,124—sued on here, is invalid. This opinion and the pleadings in that case have by us been put in evidence. (Record 1874—1938). So it is seen that the issues in that case are the same as in this.

By reference to this opinion, on page 915 of 4 Fed. Rep. the Court in remarking on the Glidden barb as shown in his May, 1874 patent, (not in this case), and which shows the same coiled spur wire barb, as in the patent in suit, make use of the following language: "The loop is, when made, only the hole "which Kelly punched through his barb." Now, there can be no difference in the effect and use of these two styles of barbed wire—Kelly and Glidden. They were both made for the same purpose, and are both extensively manufactured and used for that purpose.

The only difference that can be discerned in these two forms of barbed fence wire is in the style of the barb,—the one being made of sheet metal and the eye punched in, and the other made of wire, the eye being made by coiling the wire around something, forming the eye. As now manufactured, this eye in the wire barb is made by coiling the wire around one of the cable wires, in the process of manufacturing it.

We call the attention of the Court to the testimony of defendants' expert witness, Adolph Barthel, (Record 953–965). As his testimony is very important, we ask a careful perusal of the whole of it. He was educated in a Polytechnic school in Germany, and was afterwards a teacher there, and lieutenant of a corps of engineers. After examining the various patents —their drawings and specifications— which we introduce in evidence in this case, which see (Record 653–654), and then examining the two Glidden patents, viz: of May 12th, 1884, No. 150,683, and No. 157–124, of date November 24, 1874, concerning the former he states:

"In regard to the particular shape of and form of his barb "the inventor makes the following disclaimer, in his specifi- "cations: 'I do not claim to have originated the devices known "as spurs or prongs on the wires, they having been used be- "fore, but confine myself to the means for holding the spurs "at proper intervals on the wires.' It is well to emphasize "the first half of the sentence. * * As the inventor thus "unreservedly disclaims any invention in connection with his "barb, I am free to assume that he did not invent them." And concerning the patent, No. 157,124, he stated: "The "claim of the inventor is a twister, is 'a twisted fence wire "having the transverse spur wire D bent at its middle portion "about one of the wire strands, A, of said fence wire, and "clamped in position and place by the other wire strand C "twisted upon its fellow, &c.' This claim has to be construed "in the light of the Art preceding the invention set forth in "complainants' patent. Referring to the patents I have here- "tofore discussed, * * I come to the following conclusions:" (after describing the other patented inventions referred to). "The term 'twisted fence wire' in complainants' patent, does "not convey anything new. The state of the Art existing "before complainants' patent shows several inventions, * * "in which wire fence is combined with a spur wire; also two

"strands of wire, combined with a transverse spur wire; such "a transverse spur wire is shown in the M. Kelly patent of "February 11th, 1868, * * thus it is evident the "term 'spur wires,' in complainants' patent does not "convey anything new. * * Taking this showing in con- "nection with complainants' statement that he prefers to make "his barbs first, and then slip them on the fence wire, the term "'bent at its middle portion about one of the wire strands of "said fence wire,' means nothing more * * than a spur "wire with an eye in its middle portion, by coiling it in its "center. * * Even the clamping obtained by twisting two "wires is old. An example is shown in the Moore's patent, "June 30th, 1857, and it is performed in the exact manner of "complainants', by Kelly, in his patent of February 11th, 1868. " * * If complainants' spur is firmly held in place by twist- "ing two wires, Kelly's spur must be equally well held in place. " * * Therefore this clamping does not disclose anything "new to the State of the Art, prior to complainants' patent. " * * The combination of complainants' patent has all the "elements of Kelly's fence." (Rec 953)

This expert, therefore, concludes that there is no invention in this patent, and so, it seems to us; and we believe that in view of the state of the Art at the time Glidden claims this invention, that his patent is void, and this case should be ended here, without further investigation. But we will discuss the other points that we can anticipate.

II.

MR. GLIDDEN'S IDEA OF IT.

In the first place, let us see what Mr. Glidden had to do with the wire barb. In his amended specification for this very patent, filed December 12th, 1873, he disclaims being the inventor of this barb, and there makes a disclaimer in these

words: "I disclaim the invention of prongs *per se*, broadly, "as such have been attached to wire fences before, but confine "myself to what has been set forth in the claim." This evidence is found in the file wrapper and contents, in the patent office at Washington, a certified copy of which has by us been put in evidence. (Record, 1969, top of page.)

The meaning of this disclaimer of the invention of the prongs by this pretended inventor, Glidden, is fully shown by the use of the word, broadly, which certainly means everything connected with the prongs, which includes the coil. That he had no idea of claiming anything for the coil is clearly shown by his claim, which follows in this amendment, viz: "The "combination of the prongs or spurs D, E, with the twisted "wire A, A, and twister C, when the latter is used in the manu-"facture and support of the fence as set forth. (Rec. 1969.)

No allusion in his claim to the coil in the wire, or the manner of bending it around the wire.

His original application is equally as conclusive on this point, for he there makes no claim to the coil, but his claim is, first: "A combination of twisted wires with the spurs," and second, "the twisted wires with the spurs and twister C," (Record 1966,), showing clearly that the peculiar form of forming the eye in the barb by coiling it, did not enter into his mind, and formed no part of the combination for which he was seeking his patent, nor was it a combination with a new element for which he was seeking a patent. The Court will observe that the words enclosed in the rules in this application in the record means that they were afterwards erased by amendment.

All this throws light on his disclaimer, and what he meant by it, viz: to disclaim originality of any part, broadly, of the barbs, including the coil.

Again the same Glidden, in his application for his May patent, 1874, filed March 14th, 1874, (Record 1997–1998),

uses the following language: "I do not claim to have origina-"ted the devices known as 'spurs' or prongs on the wires, they "having been used before, but confine myself to the means "for holding the spurs at proper intervals on the wires, as "claimed." This language from the same inventor, and before his final change in his specification for this patent, 157,-124, clearly shows that the coiling of a wire barb is not a new element, or in fact any element in his combination, and that he is not the inventor of it.

Again we look at his deposition given in the case of Interference, declared, in case of Glidden vs. Merrill. This same J. F. Glidden, on cross examination, testifies that the specification to the patent No. 150,683, issued May 12th, 1874, will show that "I disclaimed to have originated the devices known "as spurs or prongs on the wire," commonly known as barbed wire, for fencing. "I never claimed to have originated the "barb." "The drawing and specification show all I done."

A certified copy of this deposition was put in evidence by defendants. (Record, 1980–1985.)

We call especial attention to this deposition in this interference case, as he does not testify in the case at bar. In this interference matter, in answer to Interrogatory 24, he states: "I never claimed to have originated the barbs; the drawings "and specifications show all I done, and that is all the way I "will answer it." (Rec., 1983.)

We think this forever settles the question of the barb,—that Mr. Glidden was not the inventor of it. We think this deposition has never before been introduced into any of the barbed wire cases heretofore tried, in which the Glidden patent was involved. Mr. Glidden's idea, then, is that he is not the inventor of the barb, in any of its parts, that he used and complainants have used in the manufacture of this Glidden barbed wire. The fact that this Mr. Glidden is not called as a witness in this case, is significant.

III.

This patent sued on is for a combination only. His original and amended applications claim only for a patent on a combination of elements. This itself is an acknowledgment that every element inhis combination is old. This fact was acknowledged by Mr. Thurston, in his argument in the Circuit Court, in which he stated that the patentee had no patent on the coil or barb, and this patent afforded him no protection on either.

But going back from the acts and testimony of this pretended inventor, J. F. Glidden, we find this coil in a wire to form an eye, is very old. It is seen in the various forms of tinner's work, pails, and various articles requiring a bail. The wire in the rim of a tin pail is coiled at opposite points to receive the bail of the pail. The links in the blind slat staple, B. Boardman patent, No. 19,747, (Record, 1986), hinges to various devices, and in a great many vessels and articles in common use. These wire coils had for years been used before this Mr. Glidden pretends to have entered upon his invention. So that it seems to us that a claim for coiling the wire barb around another, or of making the coil in any manner is not merited by this Mr. Glidden.

We will return now to the question of how these barbs were originally intended, by this pretended inventor, to be put on the fence wire. He fully describes the manner, in his specification, by saying that while it "may be turned at once around "the wire strand, it is preferred to form the central bend first, "and then slip them on the wire strand, arranging them at "suitable distances apart." He thus shows that he got the idea of barbing the wires from Michael Kelly's patent.

Kelly cut and punched his barbs first, making them in large quantities—he says in his specifications—then strings them upon the wire. And we find this man Glidden doing the same thing; makes his barbs first, with an eye made by coils in the

barb, and then slips them on the main wire. They then are to be spaced of course, in the same or a similar manner to Kelly's.

One of complainant's witnesses testifies that in the early manufacture of the Glidden wire, these barbs were all made separate, and then by hand placed on to the wire strand, and afterwards twisted together, so that Mr. Glidden's idea, conceived and carried out in practice, was to make and coil his barbs first, as did Kelly punch and cut his barbs. And then the operations of barbing were the same in each case.

The very fact that Glidden made his coiled barbs first, and placed them on the wire strand, shows that the idea was borrowed of Michael Kelly and Lucian B. Smith, as the spools with wire prongs thrust in, of the Smith patent, were of course first made before putting on. It is true that Mr. Glidden in his specification says that the barb may be turned at once around the strand. The prevailing idea however, is to coil first before putting on, and not at once around the strand.

This language of turning *at once* around the wire strand, does not appear in his original specification, filed October 27th, 1873, but appears for the first time in his last amended specification, signed, not by himself, but by his attorneys, and filed June 20th, 1874, not sworn to.

The silence of any description as to the manner of makiing and affixing the barb, in his original and first amended specification, corroborates the fact stated in his disclaimer before mentioned, viz: that he was not the inventor of the barb, but was then honestly claiming nothing for the barb in any of its parts. If the exact form of the barb had not been shown by former patents, the presumption is that he had seen that form of barb used before, and hence his disclaimer, in his amended specification of December 12, 1874, and his disclaimer in his patent of May, 1874, filed in March of that year.

This peculiar form of the barb being old, and Glidden disclaiming to be the inventor of it, it seemed in the eyes of his

attorneys, after the struggle they had had and the many times this Glidden patent had been refused (see Rec. pp. 1965–1986 and also p. 1976) that this was the only thing for them to do, and thus get up a new combination that might meet with favor in the eyes of the Examiner, forgetting however, that on May 12, previous to this last amendment, said Joseph F. Glidden had a patent issued to him, covering everything there might be in the barb, and knowing as they must, that they could not have two patents covering the same thing, and knowing further that the patent first issued rendered the other one void.

In his application filed March 14, 1874, on which his May 12th patent was issued, in which occurs a disclaimer on the spurs, he should, if he had intended to claim anything on them, in his last patent issued—the one sued on—have stated that this claim on the barb was shown in his application filed October 27, 1873; but making no reservation, it follows that, at that time, he was making no claim whatever on the barbs, or any part thereof. It seems to us that this settles the question that J. F. Glidden had no right to anything on the barb, taking it as a whole, and that all he was claiming by his invention was a combination of parts that were old and well known before. If he intended to claim anything on the barb or coil, why did he take his combination patent on May 12, 1874, which showed the coiled barb, and having taken it, why did he take his later patent of November 24, 1874?

It will be observed that in the history of his patent 157,124 as shown by the file wrapper and contents before referred to, the main thing he was trying to get a patent on, "was the "combination of the prongs or spurs D, E, with the twisted "wire A, A, and twister C, when the latter is used in the man-"ufacture and support of the fence." (See his amended claim, (Record, p. 1968.)

After having his first combination of the twisted wire with the spurs rejected, we have Mr. Glidden's own estimate of his patent without his twister, for he says in his communica-

tion to the Commissioner on December 29th, 1873, filed January 5th, 1874: That the twister cannot be dropped and leave anything practicable to this invention. (Record p. 1970.)

In this same letter he speaks of "dividing the wires with "their prongs from the twister," showing that all he had in view up to that time concerning the barbs was the *prongs*, and not the *coiled barb* which the Court in the Grinnell case inclined to give him.

He then puts forth his claim for the combination with his twister—under the restriction of a disclaimer—failing in which, after about a year's struggle iu the Examiner's Office, he finally succeeds in getting his patent through for the same combination that it was several times rejected on as being anticipated by the Kelly patent. There is no difference in his claim made as last amended and his first claim in his first specification filed, and neither shows invention, as every part of the same and each of the two elements had been anticipated by the Hunt, Smith, Kelly Nos. 1 and 2, and Glidden's first or May patent.

And it seems that in the only case where this patent has been sustained, the case of these complainants vs. Grinnell Wire Co., (24 Fed. Rep 23,) the Court after saying that the coil of the barb is not new, "it having been of frequent use, "as for instance, in the springs of door locks," further says that "the use of such a coil for the purpose of a barb on fence "wire and its combination with the other elements in its pres-"ent structure was new with Glidden." How that fact was ascertained, we are at a loss to know, unless it is presumed to be the case, because found in his patent.

If new, why did he not claim it before June 20th, 1874, the time he filed his last amended claim for this patent, always disclaiming before this, that he was the originator of this style of barb for wire? And why did he show it in his former patent of May 12, 1874?

The showing of this barb in his first patent estops him from claiming it in his last patent, the one sued on herein.

The testimony of Geo. A. Beers, (Record p. 901), Stephen L. Nichols, (Rec. p. 913,) Horatio H. Mason, (Rec. p. 920), all of DeKalb County, Illinois, (the same county in which the same Joseph F. Glidden lives), shows that on the Charles A. Beers farm, some eight or ten miles from this Glidden's home, as early as 1859, there was twisted barb wire on a fence, near the road, the barbs on which were made of wire and bent at its middle part around the strand, and that it was generally known in the neighborhood that it was there, as shown by other witnesses; and it being of such long standing, and E. A. Beers being an inventor of barbed wire in the same neighborhood, and even Jacob Haish entering the field at about the same time as an inventor of barbed wire with Glidden, as shown by the testimony of I. L. Elwood, complainants' witness, and the absence of Mr. Glidden to testify in this case, raises a fair presumption that Mr. Glidden had seen this style of coiled barbs used on fence wire for a barb, before he pretended to get up his wire, and that is the reason he disclaims the invention of the barb.

Judge Blodgett in his first case before referred to, holds this same patent invalid for want of invention, while Judge Brewer, in the Grinnell Wire Co. case last referred to, while expressing great doubts, holds it valid and puts it on the ground that the coiled barb wire was new with Glidden; and in doing so, quotes from the aforesaid opinion of Judge Blodgett. (VII Fed. R., p. 913.) But it will be seen by an examination of said opinion, that Judge Blodgett refers to the Glidden May patent, No. 150,683, instead of the patent sued on herein.

By an examination of this patent, 157,124, and the patent 150,683, it will be observed that the combination on which each patent issued was a blunt spur wire, coiled at its middle about the wire strand, and held in place by the so called binder wire. The testimony in this case conclusively shows that this style of wire was never used and never put on the market for sale. The bluntness of the barb is shown in the drawing. The

specification nowhere alludes to a sharp pointed barb. The name spur is given to the barb, but that don't mean pointed. The proper definition of spur, as applied in this patent, shown as it must be by the drawings, is simply a projection from the wire strand; nothing indicating sharpness to the barb, or that the inventor intended any sharpness to the point, occurs in the history of this Mr. Glidden's invention until he files his application for his re-issue of May 12, 1874 patent, viz: January 26, 1876, on which he obtains re-issue No. 6,913. He then describes the barbs as sharp pointed, and they are so shown in his drawings. The fact that he there uses language which denotes sharpness to the barb, precludes the idea of construing his language in his former claim to mean a sharp pointed barb.

What he means is pictured out in his drawing, which is a blunt barb. The drawings are by law made a part of the specification, and in this case the patentee refers to his drawings as explaining his specifications.

"Drawings as well as specifications are to be looked to in "giving construction to the claim of a patent in determining "what was the invention of a patentee."

Swift vs. Whisen, 2 Bond, 115

Guided by this rule, we find here a combination patent of a twisted wire with a blunt spur, which has never been used, and if the point to a barb is to be considered an element, then the combination is different from the defendants' wire herein, or any other now in use and was abandoned; if it is not an element, then all there is to his combination was fully shown and anticipated by the state of the Art, and there was no invention in it.

Again, if the blunt point to a barb is an element in the combination, then the non-use of it by the patentee and his assigns, shows a different combination, followed by them, and they cannot complain of others who never used it.

Where a patent is obtained on a combination of elements, it is well settled that the use by others of less than the whole

number of elements, is not an infringment. And it certainly must be the case that where the patentee never uses his own combination in full, it is a notice to the world that it is neither practicable nor useful.

IV.

The next thing which seems to be claimed by these complainants is that in this combination of Mr. Glidden's, the use of the binder wire is first suggested in connection with barbed wire. It cannot be denied that Michael Kelly showed this binder wire in his patent No. 47,379. It is true that he does not call it a binder wire, nor does he say that its function is to help bind and keep the barbs in place, but rather says in his specification that "I can, where it is desirable to increase the "strength of the wire, lay another wire along side of a thorn "wire, and can twist the two together by any suitable mech- "anism." "It tends to insure a regularity in the distribution "of the points in many different directions." It seems to us that the binder use of this wire is indirectly, if not directly, suggested in this patent. That it can be used for this purpose is patent to every one, and it does not require the eye of an inventor to see it.

What invention can there be in giving a name to this wire? Supposing a man had invented an ax to chop wood with, and another seeing it had applied it to chopping ice; would such an application amount to an invention? The appropriation of an old device to a new use is not patentable.

Stimpson vs. Woodman, 10 Wal., 117;
Hotchkiss vs. Greenwood, 11 How., 248;
Curtis on Patents, Sec. 33, and notes;
Woodman vs. Stimpson, 3 Fish P. C., 104;
McComb vs. Brodie, 2 O. G., 119

And it seems that this new use of this fellow wire—called a binder wire by Glidden,—met with no favor in the first case in which this patent sued on was involved. Washburn & Moen Mf'g. Co. vs. Jacob Haish, 4 Fed. Rep., 900.

On page 913 the Court says that "the idea of fixing the "barb rigidly upon the wire, and holding it in place by another "wire twisted upon it, was Kelly's."

We find, also, that Judge Brewer takes a similar view of this binder wire, in his decision before referred to.

Washburn & Moen Mf'g. Co vs. Grinnell Wire Co., 24 Fed. Rec., 24

He there says, in substance, that the idea of twisting two wires to keep the barbs in place was Kelly's. So that in neither of the cases in which this patent has been involved, does the Court look with any favor on this idea of giving to Glidden the credit of being the first to suggest this idea of a binder wire. Even if he was the first to call it such, its function was clearly shown in the Kelly patent, not only by the twisting of the two wires together, but by his hempen cord with barbs strung on one of them. How else could the barb on the cord be locked, or lateral movement prevented, except by this binder cord?

But is it true that this binder wire is the only thing in the Glidden wire that keeps the barb from a lateral motion, and is the function of it truly expressed?

Possibly by looking at this patent, with its drawings and specifications and following it literally, it may be true, but of that we will speak hereafter. In practice, however, and as shown by the Glidden model in evidence, the barbs are placed on the wire by machinery, and so firmly wrapped around that without any binder wire they would stay in place, as well as the Kelly barb when compressed on the wire. By a careful examination of these exhibits, the Court can come to no other conclusion than that if the barbs are to be put at once on the wire, the binder wire serves no more the purpose of a binder than does it in the Kelly wire with the barbs compressed.

This shows that the idea of giving this wire the name of a binder was merely a catch-word, so as to try and make it appear that the function of this wire was different in his from

what it is in the Kelly wire. The idea of a binder is consistent only with the idea expressed in his specification, that he preferred to make the coiled barbs first, and then slip them on the wire the same as Kelly did, in which case the binder might be useful and serve the purpose of a binder, but we must remember that the state of the Art at that time was the laying of an unbarbed wire alongside of the barbed wire and twisting them together, the effect of which would bind the barbs and interlock them, whether expressed or not, and seeing this, Mr. Glidden could not be considered an inventor of that use of it. It required no invention to use it for, or call it a binder wire.

V.

But let us see how much originality there is in this man Glidden. He uses wire for a fence; this had been used long before for that purpose. He puts barbs on to make his fence effective; this was done seven years before by Hunt,—and by Beers, in Glidden's neighborhood, as shown by witnesses. He uses wire for barbs; so did Smith and Beers, years before. He coils the barbs; and so did Beers, and so were a host of attachments to wires and different devices coiled, as shown and as he admits was done before. He puts his barbs on loose, and so did Kelly. He puts his barbs all on one wire, and so does Kelly. He distributes them after on, and so does Kelly. He twists his barb wire with another unbarbed one, and so does Kelly. Where is there a single thought or idea in his whole device that seems to have originality or invention in it? He certainly cannot be considered as having produced a device in this barbed wire, so original in form, features or combination as to entitle him to protection as an inventor.

It seems to us that the complainants see all this, and therefore have resorted to extrinsic evidence to show that this device is entitled to protection as an invention, because, First: it is useful. Second, it has superseded, practically, all other wire. Third, it is the most effective. Fourth, it is the easiest and

most practicable form of barbed wire to make, there is. Fifth, it is cheaper to the consumer, etc., and a few other reasons are assigned which will afterwards be noticed. At the time we are writing this argument, we have not seen the argument of complainants, but we presume that these points will be made, because they have attempted to take testimony on all of them, and made them in argument in the Circuit Court, and hence we have a right to assume that they will all be made in argument here.

VI.

First, then, as to the utility or usefulness of this pretended invention. In order to make an invention of any kind patentable, it must be useful. So required by Sections 4886 and 4893 of the U. S. Statutes.

This usefulness is prima facie established by the patent itself, but like every other fact which is by it presented, it can be rebutted by evidence. We think that slight evidence in this case rebuts that prima facie evidence.

The testimony of Charles F. Washburn, one of the officers of the corporation complainant, shows that "a needle point "which will prick and warn the animal before he has pressed "hard enough against the fencing to give himself any injury, "is absolutely essential." And this testimony is corroborated by the complainant, Elwood.

In addition to this, a dozen or more of defendant's witnesses, commencing with John Cruise, Jr., have testified that to be effective in turning stock, and of any value in the market and to consumers as barbed wire, the barb must have a sharp point,—the witnesses varying in their judgment from a moderately sharp point to a needle point, like the one Mr. Washburn testifies to. It would seem that no one would question this proposition.

Let us turn, then, to the patent, specification and drawings to see what kind of a barb this Mr. Glidden has. We find

that the specifications do not mention a sharp point, but simply in describing the barb, call it a spur wire, and he states that "the following is a full, clear and exact description of the con-"struction and operation of the same, *reference being had to* "*the accompanying drawings, in which* Figure 1, represents a "side view of a section of fence, *exhibiting* my *invention*, Fig-"ure 2 is a sectional view, and Figure 3 is a perspective view "of the same." From this specification, a manufacturer who is not familiar with the modern barb wire fencing would not infer that the inventor intended the points to be sharp.

But when we look at the drawings which the law and the specifications make a part thereof, we there see presented by a picture, which is the best description an inventor can give of his invention, and expresses the exact form of the device when language will not, that the barb is blunt, is cut square off, presents no sharp point whatever.

An inventor can claim nothing more than is shown in his specifications and drawings; the drawings are made a part of the specifications, and taken together, they are an attempt on the part of the inventor to describe the very thing he supposes he has invented.

Many vs Jagger, 1 Blatch, 372.

It must be for something described in the specification, so that any person of ordinary skill, could make a mechanism which would contain the claim.

Volger vs. Semple, 7 Bliss 382.

And what an inventor does not claim he is presumed to have abandoned.

Conkling and Stafford, 5 O. G. 335.
Evarts vs. Ford, 5 O. G. 58.

As the law in the case holds these complainants to the particular kind and style of wire shown in their patent 157,-124, they can manufacture no other and be protected by it.

The combination there shown is a blunt barb on one strand and twisted with the so-called binder wire. That this is the

style of wire claimed by Mr. Glidden is further shown by his specifications and drawings in his May, 1874, patent 150,683, and shows that at that time he did not have in view anything but a blunt barb. And we find nothing else in the history of this man's barbed wire experience or his inventions until 1876, when he attempts to, and does get a reissue for his last named patent, 160,683, in which claim he mentions the barb as "a "short wire pointed at each end," and shows in his drawing a sharp pointed barb. He thus, describing in the one a sharp point, and in the other not, shows that he understood and intended the barb in the first place to be blunt.

The question then is, is this particular style of wire useful? It seems that this ought to be determined against plaintiffs from their own testimony, for it is shown that none of this particular style (blunt wire) was ever manufactured and put on the market. The agent of the Glidden wire at this place, Manchester, who has been selling Glidden wire ever since it has been on the market, viz: since February, 1875, (Record 1998), testifies that he never saw and never knew of any such wire being manufactured and sold.

The testimony of nearly all of the witnesses whose attention has been called to it, is to the same effect, so that I think that that fact may be conceded. Now the fact that neither the patentee or his assignees ever manufactured any wire of that kind, shows an abandonment of their patent, and that this particular style of wire is not useful.

We have put a large number of witnesses on the stand who have invariably testified that a barbed wire with the end of the barb cut square off or nearly so, would be useless as barbed wire. These witnesses include farmers, stock raisers, and dealers in barbed wire, or those who have dealt in it, and not one attaches any value to it as barbed wire; and they have all testified that such a wire could not be sold on the market. Some think it might have value as a fence equal to that of smooth or unbarbed wire, and of greater effectiveness, but

that in consequence of the fact that it would cost more than smooth wire, and the cost would be equal to barbed wire, on account of the material in it, and the cost to manufacture it, no one would buy it.

It must be remembered that this device is for a fence supposed to be more valuable than a smooth wire one. That such a wire would be of value, there is no doubt; so is a smooth wire fence valuable, but for the purpose for which it was made, viz., barbed wire, it is of no value.

Many farmers gave their experience with dull wire, that it was not effective and cattle would soon learn it, and when they did, they would go right through it, and they claimed as does Chas. F. Washburn, that the sharper the barb, the better the fence, and Mr. Washburn goes so far as to say that the sharp barb is *absolutely essential.* Our testimony on this point can be found in our Record.

We have twenty-two witnesses on this question of want of utility. And it would seem without any testimony on our part, but taking the testimony of both Chas. F. Washburn and Isaac L. Elwood, who measure the utility of barbed wire by the degree of sharpness that the point contains, that a barbed wire like that shown in the drawings and specifications sued on, has no utility as barbed wire.

As against the testimony of all these witnesses, the complainants have introduced several witnesses, by whom they try to contradict the testimony of their own witnesses, Washburn and Elwood, and it looks a little strange that in the same case complainants are found trying to show that the Glidden wire is the best in the market because its point is the sharpest, and because of its sharp point it has met such a wonderful demand, and driven so many other styles of barbs out of the market, the barbs on which were not so sharp, and yet turn right around and show as they tried to by witnesses, that sharp barbs were going out of date, the people were drifting towards a dull barb, and the duller the better, and that he, the

witness, would buy such wire if any could be found in the market. I think, however, that there were only four or five witnesses who testified that they would buy such wire, and all of them had been no doubt selected on account of their hostility to barbed wire. And there seems to be a studied effort on the part of complainants to confine these witnesses to utility of this style of barbed wire to horse fences; in two or three to fences for fancy breeds of cattle.

One witness of theirs, Mr. Edward L. Mosher, who testified that it would be of use for horses, admitted on cross examination, that a twisted wire without barbs would be better for fencing for horses than even this blunt barbed wire, and also admitted that he had seen such wire made especially for horses at the Superior shops in De Kalb, and that it was called horse wire. He states also that he has never used any such blunt wire, and has had no experience with it, and that he has never known wire to be bought exclusively for horses, and admits that for other stock, the sharper the barb the better. His testimony clearly shows that he has no knowledge of what he is testifying to.

While this witness was on the stand an attempt was made to crowd a sample of blunt wire into the case, without identifying it in any way, and I desire to call the attention of the Court to the fact that this witness stated that the paint on the wire was sticky, showing that the sample was expressly made for the purpose, and recently done. This exhibit was offered in evidence, over our proper objections, namely: That the wire was not shown to have been manufactured either by complainants, or Glidden, or defendants; was not shown to have been in any proper manner identified.

Noah Bibler, another of complainants' witnesses, states that for horses a blunt spur wire, like that shown in the Glidden patent, is the best, and we call the attention of the Court to his testimony where he says that a smooth wire fence, well made of five wires, four and a half feet high, and posts but

eight feet apart, will not turn horses unless the horses are tied to a stake in the center of the lot. We ask that his testimony be compared with that of David Turner, who says this is the best kind of fence for horses, and that four feet high is high enough.

This same Noah Bibler testifies that he has got some blunt spur wire on his farm; bought it four years ago, and can't tell where he got it, the name of it, or how much he has got; don't know how much he bought, and since then has bought the sharp pointed Glidden wire; and also swears that he don't know whether there was any more of it in the market or not when he bought it, nor whether there is now or at any time since, any in the market. Also swears that the Kelly wire will not turn horses any better than smooth wire. This witness was asked to get a small piece of his blunt wire and send it to the notary, which he at first refused to do, and then said he guessed he would, but never did it. All this shows that his testimony is not entitled to any credit whatever.

The testimony of their witness, Mosher, about the twisted horse wire, brought out two other witnesses for complainants to contradict this witness. The first was the clerk of the Washburn & Moen Manufacturing Co. He testifies that he is in the office which has charge of all orders and shipments of stock, and states that he never heard of smooth wire twisted, being manufactured for horse wire; but that they do manufacture such wire, out of rejected wire and short pieces that are always left in quantity from the manufacture of barbed wire, and this is gathered together and made into barbless, twisted wire, for door-yard fences.

He says, on cross examination, he never saw any of it manufactured, and when he first sees it, it is on spools of about 100 lbs. each, and that in shipping he never breaks spools, and that within the last year he has sold between 25 and 40 tons of it. Has also sold strip wire which is used almost exclusively for door yard fences.

He also states that he wants the Court to understand that he sells that poor, rejected cast off wire for door yard fences, but says he never built any, and never saw it built. He can't name a person who has used it, nor a town he has sold it in.

Now, considering that people want an extra article of fencing for door yards, it looks as if the complainants are driven to straits in trying to prove that this worthless stuff is sold for such purposes, and such testimony is entitled to no weight, for it can't be true.

Again, they call on a witness from the Superior shops, at DeKalb, and he disowns that this wire which he says was seen there was horse wire, and says it was for door yards and clothes lines. The very statement shows the absurdity of his testimony. The very idea of taking rejected wire and patching it up for clothes lines, is a perfect impeachment of his statements, and without going further into their testimony on this point, I have to say that nearly every witness called on by complainants either shows a bias which ought to discredit him or a want of knowledge of the matter he is testifying about.

We call special attention to the testimony of one of complainants' witnesses, David Turner, who says that he has a twisted barbless wire on his farm, and so far as he could see, it is made of as good material as any wire, and he prefers it for horses to any kind of barbed wire, and says that a fence of it less than four feet high is sufficient to turn any but breachy horses; it only wants posts fourteen feet apart and well set. His testimony fully contradicts the testimony of the two witnesses who say the wire is made of pieces, and rejected wire.

One thing is noticeable in complainaints' evidence on this question of utility. No witness has testified that this kind of wire is or ever has been in the market, nor that either Glidden or these complainants ever made a pound of it, and they have not introduced a dealer in barbed wire to show how marketable such an article would be. Did not even ask the clerk of the corporation complainant or of the Superior shops, what

their opinion would be as to the marketable quality of a blunt spur wire like that shown in the patent sued on. The witnesses who testify that they would if they could buy such blunt wire, never have bought any of it, never called for it, and don't know that it is in the market, and the question asked by counsel of these witnesses, viz: "if you could obtain in the "market, such wire, would you not purchase it for your own "use" is a confession by them that there is none in the market. The value of an article is always shown by the kind the trade demands. As none is in the market, it is conclusive that it is not marketable; besides the dealers in barbed wire put on the stand by us, all testify that such a wire as this of Glidden's, shown by his drawings, could not be sold in the market.

Now on this question of utility, it is not whether an invention is useful for some other purpose than that for which it was designed, but is it a useful thing to the public, "capable "of being beneficially used for the purpose for which it was "designed."

Seymour vs. Osborne, 11 Wallace 516.
Many vs Jagger, 1 Blatch 372.

VII.

The next question is, has this style of wire shown in this patent superseded all or nearly all kinds of wire? The witnesses, Charles F. Washburn and I. L. Elwood, so testify, and claim that it is on account of the merits of the wire, but neither of them have testified that they have made and put on the market a pound of blunt barbed wire. On the contrary, they claim that the reasons why it has superseded all others is on account of the sharpness of the barb; this very reason shows that the converse of the statement would be true also, that a barb with no point would not sell in the market and never could supersede anything in the way of barbed wire.

It is true, no doubt, that more of the style of wire called Glidden has been sold since the barbed wire industry commenced, than of any other one style, but we contend that it is not Glidden wire such as his patent calls for, as before shown;

but if it was the exact style, the amount sold would be a very unjust criterion in this case, to measure either its utility or endorsement by the public. The testimony of Isaac L. Elwood shows that the means of the Washburn & Moen Manufacturing Co. are very great, so great indeed, that if they had time, they could build machines sufficient to manufacture all the barbed wire used or needed in the United States. (Record 464). And the defendant, Thompson, testified that means has everything to do with the business, particularly on account of the first cost of material, viz: wire; a car load of material costing from $1,100 to $1,800, and as Mr. Elwood manufactures from five to six car loads a day, it is evident that his material costs from $8,000 to $10,000 a day; (Record 1586); add to this the expense of labor and other legitimate expenses and it certainly puts the manufacturer with large means a great way in advance of the one with but moderate means, and in this instance is the greatest factor decidedly in pushing forward this style of wire, which they call Glidden, so as to have a cover under which to seek protection. Mr. Thompson testifies that means has everything to do with bringing an article to the front, and it seems reasonable that it should be so.

Now the fact that so much of this style of wire is sold, is seized upon by the complainants as a strong argument in their favor, and under the decision of courts, has a right to be considered in determining the value of an invention to the public. We contend that it is the duty of the Court to look closely into this matter and see how much is due to the merits of the article, and how much to wealth and influence. It is in evidence in this case that there are other styles of wire in the market which are better and cheaper to the consumers than this pretended Glidden wire; better because less dangerous to stock, and cheaper because a hundred pounds of it will go farther by some ten rods than this pretended Glidden; and this is virtually conceded by Mr. Elwood in his cross examination. (Record 466–467).

Of these kinds is that manufactured by the defendants and the Kelly wire. Why should not means and facilities for manufacturing this complainants' wire be considered on the question of its large use?

Another very important element arises here in considering this question, and that is the fact that these complainants have bought up and control nearly all the patents in parbed wire, and the machines to make it, and that nearly all of the manufacturers take license from them. Mr. Washburn testifies that they have fifty-two licensees, and that there are not to exceed a dozen establishments in the United States that are not licensees of complainants. (Record 777).

Thus the testimony shows a vast monopoly in this business. They can license or not, and to make the kind of wire they see fit, and limit the tonnage to each. Their witness, A. K. Stiles, testifies that he supposes the reason they bought up the Kelly patent was because they owned nearly all and wanted to control the business, and there can be no question but that this was the reason. (Record 412).

These complainants then, not only have the money to control this barbed wire business, but they control the patents, and can do almost as they see fit. They can practically crush any man who attempts to manufacture without their consent.

All these circumstances should be considered on the question of the extended use of the wire made by complainants, touching the question of utility. Having practically the power to say that no other kinds of wire can be made and sold, it would be unjust to say to such, the large use of your article, over that of much greater merit, in the hands of a man not so favorably circumstanced as yourselves, shall be taken into account in determining which is the most useful. This is too dangerous a doctrine, and fraught with too fearful consequences to the public to be adopted.

The testimony of Charles F. Washburn shows that there is manufactured of the Glidden wire only about one-third of

the barbed wire used in the country. He states, (Record 781): "the gross tonnage of barbed wire permitted by our licensees "to manufacture annually is 173,080. Complainants have "manufactured of the Glidden wire since 1876, about 20,000 "tons a year. Of all the barbed wire manufactured since "1877, the complainants have manufactured about one-third." Also states, (Record 776): "that they do not license any one "to make the Glidden wire; to manufacture this particular "style." Notwithstanding their means and the monopoly of complainants, and that they own nearly all the patents on barbed wire, and are the heaviest drawers of wire in America, yet they claim they only manufacture one-third of what is consumed, and their figures show much less. How, then, does the amount sold establish general utility?

VIII.

The next question is, as to the effectiveness of this wire of complainants. That it is an effective wire in turning stock, there is no doubt, but that it is the most effective wire, is not true.

But first, let us ask, is its effectiveness due at all to the patent? Following it, the complainants would have a wire they could not sell, would be absolutely unmarketable. Why do they set up the claim of effectiveness, unless it be to call the attention away from the absolute worthlessness of the real thing patented? That patent never did and never could call their attention to this feature of a sharp point in their present wire, making it so very effective, as they claim. Why then make it?

But, in fact, is it the most effective? Mr. Washburn and Mr. Elwood have so testified, and they are the only ones I can now call to mind who have. While Mr. Thompson, one of the defendants has testified and with him at least a dozen others, farmers, that the defendants' wire, and many other styles in use, are equally as effective as complainants' wire, several testifying that the defendants' wire is the most effective of the

two. The preponderance of evidence certainly establishes without question, that complainants' wire is not the most effective. They are not entitled to anything on that claim.

IX.

The next claim made by complainants is, that their wire is the simplest and the most practicable form of barbed wire there is to make. Again, let us turn to their specifications and drawings, for this case must not be tried on what the complainants have done outside of the patent itself. The statute sec. 4888 provides that an inventor must file his application, which must contain a written description of his invention and describing the same, and of the manner of making and using it. This Mr. Glidden did, and in his specification he says he prefers coiling the barbs first and then slip them onto the wire, and then twist this barbed strand of wire with another strand by a twisting key, which device he shows in his drawings. (Record 1963).

There is but one rational construction that can be put upon this description, and that is to manufacture the wire in the field by panels; the twisting key is to be at every panel, and for each wire in the panel, and he says that the twisting key can be used afterwards to tighten up the wire, showing that this key not only acts as the machine to manufacture the wire, but it can be used as a tightener afterwards; this shows that the key is a permanent feature and fixture of the barbed wire fence, is a part of it, and as the twist becomes greater at its contact with the key, and less as we recede from it, it must follow that it must be used at every panel or at least for every two or three, for beyond that distance there would scarcely be any twist in the wire, and lateral movement of the barbs would not be prevented and they would not be locked; hence the key must be at every panel or nearly so. It is true the specification uses the term "or otherwise," but the otherwise manner was not then known to Mr. Glidden or he would have expressed it. Certainly if he had intended the wire to

be manufactured in the present manner, he would have expressed it, instead of the slow way he indicates. Now this question of the manner of making the wire becomes important in view of the claim of complainants that this style is so simple and easily made that it is a great advantage, and renders it of great value to them, and should therefore be considered on the question of utility, and is one of the reasons for its general and extensive use. See testimony of Washburn and Elwood on this point.

Improved machinery for its manufacture as well as all other kinds of barbed wire has had more to do with the ease and speed of making barbed wire, than anything else. But on this question when put forward by complainants, we must look to the thought of the patentee, and this we find fully expressed in his specifications as the law requires. The only way known to this Mr. Glidden to manufacture this wire was by slipping the coils on to a wire strand and then laying another smooth wire along side, and then twisting the two together by means of his twisting machine, to-wit: a key.

As to this method of making this wire according to the drawings and specifications of said Glidden patent, 157,124, defendants' expert witness, Barthold, (Rec. 959–960), testifies:

"Now, having shown that every single element in com-
"plainant's claim is not alone broadly but specifically antici-
"pated by prior patents, it is obvious that any novelty claimed
"in the patent must rest in a new and novel combination of the
"elements, but the combination of complainant's patent has all
"the elements of Kelly's fence as described in his patent of
"February 11, 1868, and therefore is clearly anticipated in
"this respect. Therefore the invention in complainant's patent,
"if there is any, is expressed in the term substantially as spec-
"ified, forming the only indefinite element or elements in com-
"plainant's claim, and this conclusion seems to be justified by
"the language and tendency of complainant's specification, in
"which the twisting key is brought out as one of the material

"elements, as without which his claim to an invention in wire "fences would be misplaced."

"The term in complainant's patent apparently refers to an "article of manufacture largely used at present and known to "the trade as thorn wire or barb wire. By examining figure "1 it will, however, appear that the fence wire produced in the "manner and by the devices shown in complainant's patent is "an entirely different article. How does complainant make "his wire? He places a series of spurs upon one of the wire "strands, and then begins twisting the wires by means of his "key. This *modus operandi* may do for small wire and short "lengths of fence, but it is doubtful whether the inventor has "ever succeded in making a single fence with the usual-sized "wire and by the means and in the manner he describes. If "he did, it will easily be seen that the fence wire must be of "quite a peculiar nature, for it is evident that nearest the twist-"ing key the tension or twist on the wire must be immeasura-"bly larger than at the opposite end; and if the wire should be "even of the ordinary length of a fence panel I am fully prepared "to say that it would be impossible to make a fence wire in "complainant's manner and by complainant's devices in which "the twist, as regards its uniformity, resembles in any way the "article obtained by defendant in a different manner and by "different means; and if complainant should proceed with his "twisting process until the barb farthest away from the key is "fairly clamped the probabilities are that the torsional strain "nearest the key has increased to such a degree that the wire "will break. In other words, the clamping strain by means of "which the barbs are held in position in complainant's fence "wire is not uniform along the length of fence wire, but in-"creases step by step as the barbs are nearer the twisting key, "and it is therefore clear that there must be an absolute limit "in the length of fence wire thus produced, varying only with "the thickness of wire used, and it would be fairly impossible "to produce a barbed fence wire of the commercial kind of

"indefinite length as that produced by defendant. In view of "this state of affairs, it is evident that complainant's claim will "have to be restricted to a claim for a wire fence in which the "fence wire is constructed panel by panel in the manner and "by the means described in complainant's specification."

That the public shall not be uninformed as to the manner of making it, Mr. Glidden gives in his drawings a picture of his machine. (Record 1963) Now, think of the idea of manufacturing barbed wire to-day, in this manner, in order to meet the demands of the people; how would such a method "make "possible the cultivation of the extensive prairies of the west, "the pampas of Brazil and the steppes of Russia?" using the language of an eminent Judge in one of these barbed wire cases. The only way the fence could be made would be to make it in sections, panels, and that too on the ground.

This is the only mode hinted at by this patent. If they rely on the simplicity of the style of wire as shown by the patent, then they are confined to it. If not confined to the patent in the mode of making it, then they are put on the same footing as all other manufacturers of barbed wire as to each of their styles of wire, and it then becomes a matter outside and independent of the patent as to the ease with which it is made, and on this what are the facts?

The perfection of machinery has everything to do with the article manufactured, and this is in no manner connected with the invention. Thirty or forty years ago, a watch in nearly all of its parts was made by hand; to-day it is nearly all made by machinery, and yet the mechanism is a watch in either case. This manner of and improvement in making manufactured articles is due to and belongs to another line of inventors. With immense wealth at the command of these complainants, is it to be wondered at that they could command the genius of mechanical inventors, to the perfecting of machinery for their barbed wire? That their machines are good

is conceded; but that they are the best, is denied; and to the extent that they are good, do they make easy the manufacture of their wire. It is apparent from examination of their wire, without the aid of a mechanic, that their style of wire is not the easiest and the quickest to make, and yet they have taken upon themselves the affirmative of this question to prove.

Any one who has any idea of mechanics, whether he is an expert or not, must know that where an article is made by machinery, the more constant and continuous the motion of the machine, the condition of average speed being the same, the more rapid the thing can be made; and that if in the production of an article the speed of the machine must stop at any of its stages of manufacture, then the progress of making is lessened, and the longer the stop the slower the article is made. Now, applying this rule to complainants' wire, we find the barb is coiled around one of the cable wires, in the making the motion of the machine which carries this wire forward, must stop long enough for this wire barb to be coiled, not once as in many styles of wire, but twice around the wire. That this is so, would be apparent to any one without any other evidence on the point than an examination of the barbed wire. But we have proof of this by the testimony of the defendant Thompson, (Record 1580) and complainants' witness, Briggs—who is claimed to be a mechanical expert, a manufacturer of automatic machinery—(Record 432) and it is also in proof that the longer this stop motion continues, the slower the manufacture of the article, and that it takes longer to coil a barb twice around than it does once around the wire, and that the stop in the motion is twice as long as where the barb is coiled but once around. Now examine complainants' model, the Glidden wire, then the model, Haish wire, then the model, Beat 'Em All wire, and it will be seen that the Glidden is the only wire that has its barb coiled twice around. From this, it is apparent that, other things being eqaal, it must take longer to make the Glidden barb than it does either of the others referred to,

and no perfection of machinery can remedy this, for the most perfect machine cannot turn a coil twice around as quickly as it can once. Now, take the defendants' wire, (see exhibit) Beat 'Em All barbed wire, and it will be seen that the barbs are on each of the strands, instead of all being on one, as the Glidden, and each wire being barbed on the same machine, one wire on the side it passes through, and the other on its side, and according to the testimony of defendants, not disputed by complainants, both barbs being put on at the same time, (one back of the other) and at the same point of revolution of the machine, it is done twice as fast as that of the Glidden. This evidence as to the speed of putting the barbs on the Beat 'Em All barbed wire twice as fast as they can possibly be put on the Glidden wire, following their style of having the barbs all on one wire and wrapped twice around, certainly gives us the preponderance of proof, which is strengthened by the appearance of the exhibits themselves, that the Glidden barbed wire is not as easily and quickly made as the defendants' wire.

Now let us examine the Kelly wire. And here let me say that complainants have devoted a large portion of their time to show both the worthlessness of the Kelly wire, and the great expense and cost of making it. Why they have singled out this wire for their attack, we will show hereafter, but it is not pertinent at this point in the argument. Now applying the same rule to this style of wire that we do to others, that it is the perfectness of the machinery which makes it that determines the ease and cheapness of manufacturing it, then we are to inquire whether the machinery is all that can be desired or not. Complainants have sought to deceive the Court about the cost of making this wire, and to that end put Orlando P. Briggs on the stand, who was formerly in the employ of the Thorn Wire Hedge Co., of Chicago, who was the skilled mechanic having charge of the repairing of their machines for manufacturing this Kelly wire and made new machines for and improved them.

By this witness complainants proved the various processes and operations through which the wire passes before it comes out a completed wire ready for market, but they confined themselves to the operations at the *time* this witness *went there*, and did not call out the fact that the operation had been materially changed and shortened while he was there; thus it is apparent that an attempt was made to deceive. This witness details many long and tedious processes, which, if necessary, would seem to make the wire cost ten times as much as it does, to manufacture it. Among them was the fact of cutting the barbs and punching them in the same machine, and letting the barbs and punchings drop together, requiring a perforated cylinder to separate them, and the carrying of this mixture to another room for separation. He admitted that the punching was done some three or four inches back of where the barb was cut off, and also admitted that a separator could be put under the machine so that the punchings would fall in one box, and the barbs in another. When this was admitted, he had to give another reason for taking to another room to separate them, which was to clean the barbs. Why don't *wire* barbs want cleaning just as much? They are never cleaned. It is but an excuse for the old process which they wanted the Court to believe was necessary, when in fact it was not; after going through with several operations and shifting from room to room, then comes the most ridiculous part of the whole business; boys appear with long needles and punch them into a trough filled with these barbs, and get what they can on the point of these needles at each stab, and in that way get them on to needles, from which they are afterwards passed on to other needles, and then on to the wire to be barbed. This is like the old way of carrying a grist of wheat on horse back, balancing the wheat with a stone in one end of the bag instead of dividing the wheat, putting half in each end. Now it must be borne in mind that complainants have studiously avoided putting any witness on the stand to show how this work is done to-day, but take men who were there some time ago.

This same witness admitted that a machine might be made that would cut, punch and string these barbs on to the wire to be barbed, automatically, and in one and the same revolution of the machine. (See his testimony, Record 429). Mr. Thompson, defendants' witness, testifies that he has made a machine which has been in successful operation, on which he has a patent, that takes the metal strip and punches, cuts, separates the punchings from the barbs, and strings them, not on to needles, but on to the fence wire to be barbed, and all done at the same revolution of the machine; in fact, in one revolution, two barbs being cut, punched and strung in that way, and that by this machine he can complete and put on to this wire from 300 to 500 per minute, owing to the speed at which the machine is run; this is is about three times as fast as the barbs are put on to the Glidden wire, according to the number of minutes that Mr. Briggs testifies to. As to this Thompson machine, see Deft's sur-rebutting Evidence, (Record 1580). The existence of this machine, and that it will perform as testified to by Mr. Thompson is not disputed, and said witness Briggs admitting that such a machine can be made and the barbs cut and strung in that way, disposes of this part of complainants' claim about the difficulty of manufacturing the Kelly barb, and herein was the great claim by complainants of the expense. Next comes the operation of twisting. Complainants prove by this same man Briggs, that after these barbs were all on the wire, this wire was run through a machine, the barbs were separated, spaced at proper distances apart and compressed on to the wire as it ran through, then reeled on to a coil, and that this machine ran with a stop motion. This coil after it left the machine was carried into a twisting room and there laid along side of a spool or coil of wire unbarbed, and the two were then twisted together, thus making another long process; but this same witness admitted in cross examination that before he left said shops he completed forty machines, in the fall of 1882, which said company successfully ran, that ran with a continuous motion, spaced these barbs on to

the wire the proper distance apart, took the binder wire along with the barbed wire and twisted it in in the same machine and there completed it for market, (except painting), in the same machine, and by the same revolution, dispensing entirely with the necessity of taking the coil of barbed wire to another room, and there twisting it on to another machine, cutting down one lengthy process, in the operation of making this kind of wire. Why did the complainants and this witness want to keep this from the Court?

It must be because they supposed it would not be found out, and this, the pretense, could be made a reality that this Kelly wire was a very expensive kind to make. They afterwards show by this witness that they did not run as many wires through the new machine as the old one, but if the old one could be made to carry more than one wire, so could the new one, and the witness does not pretend that it could not.

Our witness, Thompson, testifies that he made a machine for spacing these barbs onto wire, and he spaced them onto both wires instead of one, and twists them together with a twister connected with the machine, the same as was done with Briggs' improved machine. We think that the proof offered leaves no doubt about the ease with which the Kelly barbed wire can be made as compared with that of Glidden's. In fact, Mr. Thompson testifies that it can be made nearly twice as fast as the Glidden, and there is not a man from the Thorn Wire Hedge Company's works, now working there, who has been put on the stand to contradict it.

The testimony in this case shows that the Thorn Wire Hedge Co., is a licensee of complainants, or at least of the corporation complainant, and its officers are presumed to be favorable to complainants, as we will hereafter show, and if this fact of ease of making the Kelly barb could have been disputed, it would have been done. The Court will see that after we took our sur-rebutting evidence the complainants were allowed to put in the last evidence, so they had the op-

portunity to contradict these facts shown by defendant, if they could have done it; but they did not, because they could not. Complainants next claim as an item of expense in the making of this Kelly wire that the wire had to all be redrawn, and prove this by this same Briggs. He gave as a reason for it, that there were always large places in the wire where it was larger than others, which would not allow the barb—having its eye punched in—to pass over it. He first said they had to redraw considerable of it; afterwards, he said they had to redraw all of their wire, and when asked how even the largest place in a drawn wire, could be larger than the die hole through which the wire was drawn, he was compelled to back down from that position, and then gave a reason that there was always more or less scales on a wire, which had to be removed by redrawing. Now if his first position is not true, how can we believe the last? And it is evident, even if he did redraw to take off the scales, it would be a very easy and quick thing to do, with but little power; nothing in comparison to what it would take to draw wire. If the company made their barbs large enough for a No. 12 wire, they certainly would pass over the largest place in a No. 12 wire, for the wire could not swell after being drawn. Mr. Thompson testifies that he never redrew the wire, never saw it done, and never noticed any such trouble as the witness mentioned. He, Thompson, also testifies that he can wth his machine, put barbs similar to the Kelly barb onto wire at the rate of 600 a minute, and that the Kelly barb wire can with proper machinery be made at half the cost of the Glidden barbed wire. (Record 1580).

Another futile effort has been made to show that the small piece taken out of the Kelly barb in punching, is a wonderful destruction of raw material. The barb and the punching show for themselves, and need no other proof to show how flimsy this claim is; but there is proof on this matter. No one on the part of complainants testifies as to the amount of loss from this source, except Briggs; why they did not weigh

the barb and the punching is strange, unless they could make a less display by doing so. Mr. Thompson testifies that it takes about 380 of his barbs to weigh a pound, and they are a metal barb similar to the Kelly, and fully as large; he also testifies, and it is the only testimony on this point, that it takes of the Glidden barb about 200 to make a pound, so it is plain that if one 20th of the barb is lost by the punching, the Kelly barbs still would take less material in weight than the Glidden barb. He also testifies that there are many styles of barbed wire easier and cheaper than the Glidden wire to make. Mr. Thompson also says that the blunt pointed barb shown in the Glidden drawings, could not be made in the same machine as the wire complainants make, as the cutting part would have to be reconstructed to cut the wire blunt. (Record 1583).

X.

The next point made by Mr. Washburn, in his testimony, is that this Glidden wire is cheaper to the consumer than any other wire. We have conclusively shown that our wire will go at least ten rods farther than the Glidden; that is, a single strand will reach that much farther than the Glidden, and this on account of the barb being wrapped once around the wire, and Glidden's twice. Mr. Elwood testifies that the difference in weight between a barb coiled once around and one coiled twice around the wire, if both made of the same sized wire, would be about an ounce to the rod in favor of the former. We have shown it to be more, but take his estimate and there is a loss of a pound in every sixteen rods of Glidden wire comparing it with our wire. This would show that ours, made of the same sized wire would reach over six rods to the 100 pounds more than the Glidden, and what has been said of ours may be said of the Kelly wire, when of the same sized wire and with the same twist. Another small item enters into this estimate; the Glidden wire, having its barbs all on one strand as is shown by the testimony herein, that wire goes through the machine with a greater ten-

sion than the one not barbed and this cannot easily be avoided. Take two wires then of equal length before going through the machine, and let them go through, one much tauter than the other, the one with greater tension comes out the longest, or in other words, the one not strained is considerably shorter than the other, and a piece must be spliced in to make out the length, and this adds to the weight. A pound of such wire added, makes the difference of nearly a rod in length, because a pound of wire should reach a rod.

As it is shown that the Glidden wire is not the cheapest to make, and as it does not go so far as some other styles of wire, and as Mr. Washburn has sworn in this case that he can get from one quarter to one half cent a pound for it more than any other wire can be sold in the market, we fail to see how it can be cheaper. It certainly is not cheaper so far as its expense for making a fence, and so far as its quality as a fence is concerned. The testimony of most all of the witnesses who have used our wire, and nearly all who have used the Kelly wire, is that the Glidden wire is not the best; is no better than the Kelly, and some think not as good, and not as good as our wire. There are no witnesses on the part of complainants who have attempted a comparison as to the quality and effectiveness between our wire and the Glidden. So it stands here as a proven fact, that our wire is the cheapest wire to-day in the market, because it goes farther per 100 pounds, and its effectiveness is equal to that of any wire in the market, including Glidden's. And some say it is less liable to break, as the strain is equal on both wires, when in the Glidden, the greater strain in making being on the wire that is barbed, it breaks before the other does, as it has to bear the strain that should come on both.

In no sense, then, is the Glidden the cheapest wire to the consumer.

We have now considered the main claims apparently made by complainants in favor of their wire. Of course, there may

be more, but as we have not seen their argument, we have to anticipate it from the kind of testimony they have put in.

XI.

The attention of the Court was called to the attack the complainants have been making on the Kelly wire. This has been done all through and without anything on our part to call it out. It seems as if this Kelly wire is a ghost that continually rises before them and it will not down. It is plain to our minds why this is so. It is because the Kelly patent, or rather his invention, is the barbed wire that has produced this wonderful revolution in the use of barbed wire throughout the world. It contains the sharp-pointed barb in combination with the twisted wire, and has in it every possible element of barbed wire that is in the Glidden (except the blunt point) and that it is of great value is shown by the fact that the corporation complainant bought it—the patent—of the Thorn Wire Hedge Co., and have paid for it, at the lowest estimate, not less than one and a half million of dollars. The testimony of their witness, A. K. Stiles, the late president of said company, shows that said complainants bought said patents, and in consideration of that purchase, allowed said Thorn Wire Hedge Co. to manufacture what they desired free of royalty, and further it paid said Thorn Wire Hedge Co. a royalty of thirty-seven and a half cents on every hundred pounds which these complainants made of their own, and on all that was manufactured by all of their licensees, which it seems were fifty-two in number; and this continued until December, 1878, when, on a pretense of said company taking a license from the Washburn & Moen Manufacturing Co., under the Glidden patents, the royalty was reduced to twenty-five cents per hundred pounds. (Record 405, 408 and 409.) Mr. Washburn testifies that the annual tonnage of all the licensees of complainants is about 173,000 tons, and that of the complainants is about 20,000 tons annually; (Record 781); thus we have a total tonnage of 193,000 tons, by the complainants and their licensees. Deducting 3,000

tons for the Thorn Wire Hedge Company, we have a grand total of 190,000 tons, which the complainants were liable to pay royalty on, annually, and taking the royalty at twenty-five cents per hundred pounds, which makes $5.00 per ton, and we find it amounts to $950,000 per year, and as the Kelly patent did not expire until February, 1885, they had nine years to run under this arrangement; it will thus be seen that the royalty must have been enormous. But let us take the amount of barbed wire which the complainants alone have manufactured, which Mr. Washburn estimates at 20,000 tons annually, and for the nine years' life of the patent it would amount to 180,000 tons. This at five dollars per ton amounts to $900,000, and as they allow their licensees eighteen times as much tonnage as they reserved for themselves, and as they manufactured, as they say, one-third of all that was manufactured in the United States, it is safe to say their licensees manufactured twice as much as they did, and the royalty would have amounted to nearly, if not quite, $3,000,000. But supposing we cut it down to half that royalty, we yet have at least $1,500,000 that said complainants paid in royalty for that Kelly patent, and yet their testimony shows that they never manufactured any of that Kelly wire. Why did they pay that enormous sum for it? It will not do, as did Mr. Stiles in his testimony, to say that they could not tell what were the possibilities of the future, for, according to Mr. Stiles' testimony, they contracted to pay at least one-third of what it cost to make their wire, in the shape of royalty, and had been in the business long enough to have some idea of the growth of the business. (Record, 409.)

But what did they buy it for and pay such a vast royalty on all they made and all that their licensees made? Don't their actions speak louder than their words, and say that it was because they knew that the Kelly patent was the one thing needful in this barbed wire business? The fact that in their cases brought before the expiration of the Kelly patents, they sued on this Kelly patent, shows that they regarded it as a strong

staff to lean upon. Mr. Stiles testifies that the corporation complainants' attorneys did not give him much information on the subject of what they wanted the patent for, but that he supposed they wanted it so they could control the barbed wire business; but that reason is equally as bad for them, for it shows that his idea was that they wanted a patent to fall back on that would give them absolute control of it; and the fact that they allowed said company to have free license to manufacture said wire, shows that it was not the use they wanted so much as the control of the leading patent on barbed wire. Now it seems to us that this is a feature of the case which ought to have great weight in determining the validity of the Glidden patent.

One other matter, in connection with the question of large use of the Glidden wire, I had forgotten under its proper head, viz: the fact of threats to dealers and users of barbed wire. It is shown in evidence, by defendant S. Thompson, that notices are sent out to such parties, and that it has had the effect to prevent many from making, vending and using unlicensed wire, and this is done while suits are pending, showing that complainants are not willing to let the law take its course, but are determined on a course of intimidation, which can be for no other purpose than to compel manufacturers to become their licensees. (Record 1586, Ans to interrogatory 43). This fact has an important effect in increasing the sale of complainants' wire, it being now generally understood that complainants have control of the barbed wire business, and that it is dangerous to touch any wire unlicensed, so it is plain that they have accomplished about all that they started out to do, viz: to control and monopolize the business; they can then charge their own prices to the great damage of the public. If it be claimed that they have a right to notify all parties who they think are infringers, it does not help them any on this question of extensive use, as the effect is the same on parties making, dealing in, and using barbed wire, and largely increases

their business. This aggressive policy on the part of complainants has as much to do in increasing the demand for their wire as the large amount of wealth at their command. And, however meritorious a barbed wire may be, which is not controlled by them, and however free the operators in it are from being infringers of complainants' wire, and others it controls, the tendency is to crush them out. Now, as complainants have made the claim of large use of their wire as an evidence of utility, which sometimes under the decisions, the Courts have a right to consider, yet in considering it in this case, it is of the utmost importance that all of these matters urged by defendants as causes of this large use, be thoroughly examined to see if they are not, as we claim, the sole cause of it.

Another point in connection with this Kelly wire overlooked is, that the evidence shows that it is used largely for fencing railroads. This is disclosed by the evidence of A. K. Stiles, (Record 462), and by David Turner, complainants' witness, (Record 593), and W. B. Smith, defendant's witness, (Record 1755), who testifies that the new Minnesota & Northwestern, running from Dubuque to St. Paul, is fenced with it. We here suggest that railroad companies never buy a cheap, inferior, or worthless article, but are compelled for their own protection and the protection of the public, whose interests in connection with such roads are in their charge, to fence with the very best materials they can get.

We have thus been full in presenting this argument on these various questions, because we think the Court must conclude that the Glidden patent sued on herein is void, for any one or all the causes heretofore set forth, and being so, the Court will not have to enter upon the question of prior use.

Judge Shiras, in deciding this case in the court below, in his opinion in 33 Fed. Rep. 261, takes up, step by step, the progress in the art of making barbed wire for several years prior to Glidden's pretended invention, and very conclusively

shows that there is no invention in this patent, No. 157,124, and but for the fact that his Honor, the circuit Judge in that circuit, decided, after much hesitation, that this patent is valid in the case of these complainants vs. the Grinnell Wire Co., 24 Fed. Rep. 23, Judge Shiras evidently would have decided this patent void for want of invention. He practically does do so; yet, as the circuit Judge was above him, he had to defer his judgment to his superior, the circuit Judge; but this Court is not so bound.

When this patent was first involved in litigation—these complainants vs. Jacob Haish, reported in 4 Fed. Rep. 900—Judge Drummond decided this patent void for want of invention. Many other patents were involved in that controversy. Among others was Glidden's May 12 1874 patent, No. 150,-683. The Court held the May patent valid, but the one sued on herein void. A motion for re-hearing came up before Judge Drummond, decided in 7 Fed. Rep. 906; in this rehearing, this patent sued on herein is not once alluded to. Complainants seemed to have acquiesced in the decree of Judge Drummond, declaring it void.

The next case of these complainants is against Fuchs, reported in 16 Fed. Rep. 661. This was an action on re-issued patents—viz., 6,902, on the Kelly patent, 74,379, and Mr. Glidden's May 12 1874 patent, No. 150,683, and re-issue No. 6913. Judge Treat there held the re-issues void, but the patent in this suit was not involved therein. The re-issue being declared void, the May 12, 1874, patent, having been surrendered, left complainants only this patent, No. 157,124, sued on herein, as their only Glidden patent, but it had been decided void in the Haish case, in 1880. A new case was brought in 1885, before his Honor, Judge Brewer, against the Grinnell Wire Co., reported in 24 Fed. Rep. 23, in which, as before stated, the Court held, after some hesitation, this Glidden patent valid, and in doing so referred to the case before Judge Drummond, the Haish case, 4th Federal

Rep., as though Judge Drummond had held this Glidden 157,-124 patent valid. On the contrary, in that case, the Court held the patent sued on herein, void, and, as before said, it was not referred to in the re-hearing reported 7th Fed. Rep. The language used in the Grinnell wire case, attributed to Judge Blodgett relates to the Glidden May 12 1874 patent, and not to the one in this suit. (The exhibit in this case of the opinion in the 4th Fed. Rep. is by Judge Blodgett, but the reported case in 4th Fed. is by Judge Drummond; a mistake somewhere).

The only other litigation by complainants on this patent 157,124 is the present one. It has been passed upon but three times, and now the patent has expired.

The costs in this case will probably reach nearly $10,000. In the court below they were $4,986.70. The record contains over 2,000 pages, the printing of which must have reached about $4,000. The question of costs in this case, therefore, is a matter of concern to the parties hereto, as well as the other interest involved.

One point forgotten in its order, viz., the claim of Glidden that he was first to invent the *locking* of the barb, by the use of the binder wire. Fig. 2, in the drawings of the M. Kelly patent, No. 74,379, Feb. 11, 1868, (Record 2001) shows the twisted or binder wire. In his specification he says: "I can, where it is desirable to increase the strength of the "wire, lay another along side of a thorn wire, and can twist "the two together by any suitable mechanism. This construc-"tion is represented in Fig. 2. It tends to ensure a regularity "in the distribution of the points in many different directions. "* * * Some of the advantages of my invention may be se-"cured by simply stringing the thorns on cords of hemp or "other analagous material, holding them in place by twisting "two or more cords together; such thorny cords may be used "in connection with my large rope, 'G.'"

The use of this binder wire to help lock or block the thorns is thus clearly shown in this Kelly patent, and while he does not use the word *lock*, it is clearly shown, and if this twisted wire is drawn tight, as in a fence for use, it will be found that it does *lock* the barb as effectually as in the Glidden wire. If permitted on oral argument, we will demonstrate by a model of a fence panel, by stretching the wire as in use, that these barbs are *locked and kept in place*, both lateral and rotary motion being prevented. This being the case, how can Mr. Glidden, by picking up this twisted wire, putting his barbs on it, then *say* it *locks*, and get a patent on it? If the Kelly binder wire *does* lock the barb, and no one can deny it who feels of the barb on a fence in use, then its use as a lock was known to Mr. Glidden, and it was not patentable for him.

Although believing that this Court will never go beyond the state of the Art in this case, but declare the patent in suit void on that ground, yet we must present a few instances of prior use, proven, in this case.

XII.

PRIOR USE.

Having touched in argument many of the questions which complainants have pressed upon us, we will now turn to the question of prior use of barbed wire; that is, its use before Mr. Glidden pretends to have originated his wire involved in this case.

Defendants have given notice of and set out in their answer, seven different places and parties, using a barbed wire for fencing, substantially like that manufactured by complainants, and have proven another fence not set out in their answer, making eight in all. These different cases of prior use, we will designate by naming them certain fences, or giving them the name of the man making and using them.

They are, the Delhi Fair Fence, the Morley Farm Fences, The Beers Fence, The Hutchinson Fence, The C. D. Stone

Fence, The W. H. Long Fence, The Powers fence and The Manchester Fair Fence. We have named these fences more in their chronological order as to time of use, than according to the order of our proof on them.

FIRST.

DELHI FAIR FENCE.

First then, comes the Delhi Fair Fence. The testimony of the defendants corresponds with the allegations in their answer, that at an agricultural fair held in the town of Delhi, in Delaware county, Iowa, prior to the war, or in the first year, there was on exhibition when the fair was held on the land of Andrew Stone, about half a mile north of Delhi, a panel of fence, made of a single wire, barbed with wire barbs, the points made sharp by cutting the same diagonally and wrapped twice around the fence wire, the ends projecting out some three-fourths of an inch or an inch long; said barb being in all its essential parts like the barb now used by the complainants, on their manufactured wire which they call the Glidden. That there were from three to four strands of this single wire, attached with one end to a post, the other to a post or tree, a part of which were barbed as before stated, which constituted this panel of fence. That it was not entered for a premium, but was put on said grounds on the second day of the fair about noon, by Alvin Morley, aided by H. L. Bates, and the same was for exhibition, and as to the year said fair was held, the witnesses vary, some fixing it in 1858, some in 1859, some in 1860, and one as late as 1861. All fixing the time positively before the war of 1861, excepting one, who while giving it as his belief that it was before the war, thinks it was possibly in 1861; but all agree that it was at one of the fairs held at Delhi, on Andrew Stone's farm. In relation thereto the following facts may be considered as undisputed, viz: that prior to the late war, possibly in the first year of it, the fairs of Delaware Co., were held at Delhi; subsequent to the war they were held at Manchester; witnesses for complainants as well as for de-

fendants testifying to this. That of those fairs held at Delhi, at least two, but possibly four were held on the farm of said Andrew Stone, which fairs there held, included the last one ever held in Delhi. All of the witnesses agreeing that one of those fairs on Stone's land was in 1859; some thinking that was the last, others that 1859 was the first, and others that it was the second fair held on said farm. The records of the fair cannot be found. Whether these fairs were in 1858, 1859 and 1860, or 1859 and 1860, or 1858 and 1859, is not very material, as all the testimony on both sides (except one) fixed them positively as having been held before the war. The undisputed date being then, before the war, that these fairs were held, we take the date of prior to the war as definite. At one of these fairs, this panel was on exhibition, as testified to by some of the oldest and most respectable citizens of Delaware County, some twenty-three witnesses, many of them testifying to circumstances that fix the fact of the existence of that fence positively. We will abstract the evidence of each witness, giving it in as few words as possible to save time and space.

D. S. Potter, a farmer living near Manchester, owns 196 acres, testifies: "I was at a fair held on Andrew "Stone's farm before the war; think it was 1859 or "1860, and while there I saw a fence on exhibition, composed "of three or four wires which had barbs on the top wire. "The panel might have been 12 or 16 feet long; the barbs "wound around twice; the barbs were put on about "the same as the Glidden wire, except that the wire was "larger. Alvin Morley had that wire on exhibition, and broke "off a piece of it and gave it to me, which piece I have al- "ways kept; for a time in a summer kitchen, and then put it "into an old relic box, where it was ever afterwards kept "until the day I produce it here in court; I identify the piece."

It was then put in evidence and marked and called the "Delhi Fair Wire Exhibit." The piece

is in court and on file. This piece of wire shows for itself, its age is apparent, and the style of the barb is like that of the Glidden barb in use. The only difference between the style of the two wires is that this "Delhi Fair Wire" is single and the Glidden wire is of two strands twisted together. This same Potter further testified: "I saw this same kind of Delhi "fair wire on the Morley farm near me, some years, from "three to five, after I saw that at Delhi. It was used on this "Morley farm to keep stock out of his field; was two places, "at least, of it, and across two stony places where he could "not set posts in the ground; I am positive of seeing on ex- "exhibition at Delhi, at this fair, a barbed wire fence like, and "of which the piece produced is a part." (Record 1223).

The fact of having the wire all these years and remembering distinctly where came from, is conclusive evidence that the kind of wire produced was on exhibition, before the war, by Alvin Morley. There are many features of this testimony to which we would like to call special attention, but only have time to call the Court's attention to some of the main facts in the testimony of each witness. The fact that the Record in this case contains 2,000 pages, and not abstracted, will make it difficult for the Court to examine all the testimony on these questions of prior use, but would like it to be done as far as can be.

The next witness whose testimony is similar to that of Potter, is H. L. Bates, a blacksmith living now in Manchester, but who then lived in Delhi, and there carried on his trade. He testifies (Record 1321): "At a fair on said Andrew "Stone's land, north of Delhi, before the war of 1861, Alvin "Morley had on exhibition a panel of barbed wire fence, con- "sisting of three wires, one end of which was fastened to a "post, the other to a tree, and a stake in the middle. There "were barbs on the top wire and a few on the second. I "helped Morley put the barbs on these wires, and helped put "up the fence, and it was put up the second day of the fair,

"as Morley got there too late to put it up before; got through "about noon of the second day. The barbs were cut by Mor- "ley before he came there, with, I think, a cold chisel; were "cut slanting, and the ends filed or ground off, a little. The "barbs were annealed by heating in a wood fire, and were put "on with two irons, which I had previously made for him. A "duplicate or fac-simile of these irons I have made at your re- "quest on the day of examination, and with them made two "samples of wire, which I here produce to be introduced in "evidence, showing that they are like the Delhi fair wire and "can be made with the tools described."

These tools and pieces of wire made with them by Bates are put in evidence, which see, called Bates' Exhibits, 1, 2 and 3. He further testifies:

"I made other barbed wire for Morley, that was used at "his mill and on a cow pen. I made another piece of barbed "wire for Mr. Morley, say 30 feet long, to put on his cow "pen. I saw some of this barbed wire of Mr. Morley's on "his farm east of Manchester, I think about 1861." Exhibit Delhi Fair wire exhibit, identified by Potter, is handed to witness and he is asked how it compares with the one he and Mr. Morley put up on the Fair Ground at Delhi. He answers: "If it is not a piece of the same wire, it is so like it I cannot "tell the difference." (Record, 1321.)

The attention of the Court is particularly called to this witness' testimony. He knows about this wire and can't be mistaken. If the Court will examine with a glass the ends of the barbs, in this "Delhi Fair Wire Exhibit," they will find that they are filed off, the file marks are there now.

Joel Bailey, an old and well known citizen of Delaware County, was County Judge for some time, County Treasurer, and Surveyor. He testifies: "the first time I ever saw barbs "on wire was on a sample at the Delhi Fair; it was before the "war; there was a wire at least 10 or 12 feet long; attached

"to posts; one end to a post anyway; think the barbs were "made of a lesser wire, and were wound around; think 8 or "12 inches apart; I thought they would be a rough thing on "horses; I remember the barbs because they were a new "thing; I think they called them prickers instead of barbs; "the ends of the prickers stuck out in opposite directions; "were longer than they are now; were a crude thing compar-"ed with what they are now." (Record 1151).

Such testimony, by so careful and intelligent a man as he is, is of great weight. This witness is quite positive that there was a fair in Delhi in 1861, but he puts the time of seeing this wire before the war.

T. W. Robinson testifies to seeing this barbed wire at this fair, and remembers it distinctly: "I attended two fairs at "Delhi, in the falls of 1859 and 1860, held on Andrew Stone's "grounds; I was assistant marshal of the fair, and traveled "around the ground on horseback; had a very fine horse; "got his lip cut on one of the barbs, which bled a good deal, "and that is what attracted my attention to the fence; but for "this circumstance I probably would never have noticed it, "although I had hitched my horse to one of the posts of the "fence." His reason for remembering this barbed wire is such that he can't be mistaken about it. (Record 1061).

Geo. A. Underwood testifies: "I was at the fair at Delhi, "before the war, on Andrew Stone's farm; I saw a piece of "fence there 10 or 12 feet long; it had three wires; the top "wire had barbs on it; were made of common smooth wire, "and wrapped two or three times around." On cross examination he states: "the reason I remember it so distinctly is "that in wrestling with a boy, I was thrown on to the fence "and got a cut below the eye." He showed the scars at his examination as a witness herein. (Record 1961, Cross Ex. 1075)

John H. Burrington, another old settler and a well-known man in Delaware County, testifies: "I saw at one of the fairs

"on the Stone farm, before the war, 1858 or 1859, some wire "fence; one end attached to a small tree, and my recollection "is two posts to hold it up; the wire itself was smooth; one of "the strings was barbed by wires being twisted around this "smooth one and cut off slanting; I think it was the top wire "that was barbed, the whole length of it; the barbs were 8 "or 10 inches apart; there were some three or four wires on "the fence; it was a rod in length or over; the barbs were "wound around two or three times; the ends were cut off "slanting, and were an inch and a half long, perhaps; what "called my attention to it was a lot of fellows were having "some fun, trying to drive a bull on to this barbed wire; one "Thomas Wragg was riding the bull around the ring." He gives a circumstance which causes him to remember it. (Record, 1178.)

John H. Peters, a prominent attorney at our bar for the last 35 years, a member of Iowa's Constitutional Convention, and Colonel in the late war, remembers the fence well, and that there were barbs on it; also remembers Thomas Wragg. He testifies: "The Delaware County fairs, before the war, "were held in Delhi; the last two on Andrew Stone's farm; "the last I attended, I think was in 1860, and one in 1858, is "my recollection; at the last fair I attended there was a wire "fence exhibited there; I think but one panel with two posts; "wires strung between the posts; three or four, maybe five "wires; the wires were what we now call barbed; Mr. Thorpe "called them prickers; my best recollection is that they were "short wires twisted once or twice around the main wire; cut "off diagonally, so as to leave sharp points; I am *positive* "that there were barbs of some kind on a wire, or wires, com- "posing that panel of fence; I remember of discussing the "matter of this fence with the farmers; I remember seeing "Thomas Wragg having some sport with a bull; he was pret- "ty full." (Record 1212)

John Dubois, who was Deputy Sheriff at Delhi, testifies that on the night before this barbed wire fence was put

up on the fair ground, Morley came to his house with a bundle of barbed wire and staid over night, and left in the morning for the fair grounds. It seems that Mr. Morley did not put that wire up; but doubtless on seeing Mr. Bates, he preferred to have a more perfect wire than he had himself made; but it shows that Mr. Morley was experimenting in barbed wire, and had made it himself.

John Dubois testifies: "At a fair held in Delhi, before I "went to the war, I saw a specimen of wire fence; it was on "Andrew Stone's farm; it seems to me the wire was larger "than we have now, and the barb was the same size as the "other wire; the barb was wound around the main wire and "stood out crosswise; stuck out from main wire: I think it "was in 1859; I was living in Delhi then; I saw Mr. Morley "there with it; they called him crazy Morley; he stayed at my "house the night before; he had this wire at my house the "night before; Mr. Morley had a piece of land near Spring "Branch, near Chas. Grummond's; I saw a piece of barbed "wire there, right by the side of the door, in a kind of cellar; "it was in a roll, looked just like the wire I saw at the Delhi "fair ground, only more of it." (Record 1498).

N. Ruggles testified: "I attended two fairs at Delhi, in "1859 and 1860, on the Andrew Stone farm. I exhibited a "fanning mill there,—my improved mill; I recollect of seeing "a panel of wire fence not far from where my mill stood; I "don't now remember whether there were any barbs on it or "not; I didn't notice it enough to give a description of it."—(Record, 1275.)

While this witness did not see the barbs on the wire, his testimony shows that the panel was there.

A. Shelden owns a large farm adjoining Manchester, Iowa. He testified: "I attended one fair at Delhi, before the war. "At that fair I saw on exhibition a wire fence,—wire stretched "from a tree to two posts; as near as I can recollect, were three

"wires; on the wires were some wires wound twice around, "points running out opposite each other, or nearly so; were of "same size, I think, of the other wires; some called them "prickers and some snags, at that time; they are called barbs "now; this fair was on Andrew Stone's farm." The "Delhi Fair Wire Exhibit," identified by witness Potter, is handed to "this witness Shelden and he said: "That barb fartherest from "the loop looks like the one on that wire." (Record 1264).

David Conner, a farmer living near Delhi, testified: "I "think there were three fairs held on Andrew Stone's farm, "near Delhi, in 1858, 1859 and 1860; I saw a wire fence with "barbs or prickers on at one of those fairs; not such barbs as "we use now-a-days at all; they were just wires bent around "a smooth wire and sharpened and stuck out an inch and a "half or two inches; one end of the fence was fastened to a "tree and the other to a post or tree; the top wire had these "prickers on; when I first saw it I didn't know what it was; "my attention was first called to it by Mr. Wragg; he asked "what I thought of it for a fence; the opinion of most of the "people around there was that it would be a dangerous fence, "would destroy stock; I think it was in the year 1859." (Record 1169).

Aaron Sullivan, a retired farmer living in Delaware county, Iowa, 41 years, testified:

"At a fair in Delhi, held before the war, said to be on "Stone's place, I saw a wire fence strung on posts; the top "wire had prickers on it; these barbs were wire, pointed "sharp, twisted once, I think, around the wire, and were an "inch, any way, out from the wire, an inch long; the wire "that was barbed I should think was 12 to 20 feet long; I "think it was 6 inches between the barbs; might have been 8 "or 10; it was before the war, and I think was in 1858; might "have been 1859; I went up and examined it with a neighbor; "we talked about it; a man seemed to be exhibiting it; I don't "know whether he was the maker or not; I asked him what

"was the object of the slat that hung under the wire; he said "it was a sight, to turn away stock so they wouldn't run "against the fence." (Record 1161).

Oscar Wellman, a large farmer, testified:

"I first saw a barbed wire fence in this, Delaware county, "Iowa, at Delhi, the county seat, on the Fair Ground, on An- "drew Stone's farm; there were three strands of wire; the "top wire had other wires twisted around it; one twist or two, "I can't say; it was just a section of wire some 15 or 16 feet "long; the barbs were on the top wire; I saw it there pre- "vious to 1861; I am positive of that." (Record 1133).

Enos Hamblin testified: "I attended a fair at Delhi; I "think it was in 1859; I had a two-horse farm wagon on ex- "hibition; I saw a wire fence there; can't say whether two or "three strands of wire; there was one smooth wire, anyway, "and the top wire had barbs on; there might have been two "smooth wires; I think the barbs were of smaller wire than "the fence; the barbs were bent around a common sized fence "wire; I should think the whole of the top wire was barbed; "it was before the war of 1861 that I saw the wire." (Rec- ord, 1124.)

E. Healy, an old resident of Delaware county, a well-to-do farmer of 500 acres, and an agricultural implement man, testi- fied: "I remember two county fairs at Delhi, on the Andrew "Stone place; were held about 1859 and 1860, or 1861; I ex- "hibited a McCormick reaper there at the fair; at that time I "saw for the first time a barbed wire fence on that fair ground; "my recollection is that it was the last fair held there; the wire "was a plain black wire, with barbs of wire twisted twice "around, and I should judge of same material; I should think "the strands were ten feet long; I saw it several times during "the fair; I went up, once, and examined it closely; it was "new to me, and I was interested in fences; my recollection "is that it was in 1859." (Record, 1088.)

N. S. Hale testified: "I attended a fair at Delhi, on the "Andrew Stone farm, before the war; I first saw barbed wire "at that fair; I can't say the year it was in; I went along by "the side of the fence; the wires were on posts, and some "barbs on them; can't say how they were put on; think they "were a smaller wire, and twisted around the wire that ran "horizontal on the posts." (Record, 1090.)

Newman S. Preston testified: "I was in attendance at "one of the last two fairs held at Delhi, on the Andrew Stone "farm, before the war of 1861; I was policeman there, and "Tom Robinson was marshal or deputy marshal, at the time; I "saw a wire fence on exhibition, at the time; the wire was "hitched one end to a tree, and there were two posts, and three "wires on it, attached to these posts; I think the wire ran "around the end post and back to the wire, and twisted around "it; there were what we termed pricker wires, on them; they "were put on and twisted around two or three times, being "cut off kind of lenghwise of the wire, leaving both ends point-"ed. Mr. Morley was exhibiting the fence. Mr. Morley had "a wire fence with prickers on, on his farm east of Manchester "and next to Ben Shelden's farm. The most part of this fence "was of boards. There were two points of limestone rock "came up out of the ground. He could not set posts in it. He "had wire stretched across, and a part if not all of the wires "had prickers on, same as were on the fair ground. One of "the spots was about four rods across, the other two or three "rods across; I think about three or four wires on the fence. "I saw this barbed wire fence along next to Ben Shelden's at "different times from 4 to 6 years. It was after I saw the "Delhi fair fence."

The exhibit, "The Delhi Fair Wire Exhibit" produced and identified by the witness, D. S. Potter, was here handed to this witness, Preston, and he was asked, (Int. 31), how it compared with the wire and barbs that he saw at the Delhi fair before the war, to which he answered: "If it is not some

"of the same wire, it is some other made so near like it that "I can't tell the difference; and it looks like the wire that I "saw on the fence on the Morley land next to Ben Shelden's." (Record 1278).

Jonathan Lukenbill testified:

"I attended a fair at Delhi, on Andrew Stone's farm, be- "tween 1858 and 1860; I saw there on exhibition a panel of "wire fence; I don't know as there were more than one strand; "there might have been three; the wire was a little stouter "than that now in general use; there were barbs on it; don't "think they called it barbs then; should judge they were from "a half to three quarters of an inch long; they looked similar "to barbs they put on now; they were made of the same "wire, I should judge; they were twisted twice around the "main strand; I saw Mr. Morley at that fair; he was around "that fence; he showed it to the people, how it would work; "I got acquainted with this Alvin Morley about 1857; I saw "some more of this same kind of barbed wire at Mr. Morley's "mill on the Maquoketa; he stayed at my house one night, "and the next day I took him to his mill, and I saw some of "it there, like what I saw at the fair; it was after the fair that "I saw it; think it was in 1859 or 1860; I was milling in "1859 and 1860; afterwards farming." (Record 1445).

A. A. Strong testified: "I attended a fair at Delhi, on An- "drew Stone's farm; think it was in 1859; I know it was before "the war of 1861; I saw a sample panel of wire fence there on "that fair ground; there were three wires; the top wire had "what we call barbs now; think we called them daggers; "they were made of wire wound around the main wire; I "think twice around; it was more than one lap around any- "way; they were of the same size of the main wire; or may "be a size smaller." (Record 1384).

P. McMeel testified: "I came to Delaware county in 1855; "I lived in Delhi 24 years; the first barbed wire fence I ever

"saw was in Delhi at the fair; either in 1858 or 1859; I think in "1859; I saw there a panel of fence; I cannot tell how long "it was; I remember there was a barb wire on the top; I re- "member looking at the fence, and other parties along with "me." (Record 804).

Rollin Lewis testified: "I attended one whole fair and "part of another fair at Delhi on Mr. Stone's place, before "the war; at one of those fairs I saw, on exhibition, a "sample of wire fence; there were three wires, I judge, and "strung on to three posts, or two posts and a tree, not posi- "tive which; it was a single wire with barbs, I should think "the same size of the wire; there was only one wire they "were put on and they were a good deal further apart than "they are put on now; I think the wire was the same size as "the single fence wire we used at that time; the barbs were "wound around the main wire in some shape." (Record 1460).

H. C. Spangler testified: "I was at a fair in Delhi, I "think in 1858; it was before the war anyway; I saw a spec- "imen of wire fence; can't say how long it was; may be 20 "or 16 feet; think there was but one strand; it had some kind "of a barb on; my brother-in-law called my attention to it; "I knew Mr. Morley ever since 1857; we called him old Mor- "ley; I saw some of this same kind of wire on Mr. Morley's "farm, south of the railroad track, between Manchester and "Delaware, near Mr. Grummond's farm; it was in a shed, on "some posts; the shed was covered with straw and used for "cattle and tools; there were between three and six strands "of it, and reached from one side of shed to the other, and "all were barbed; the barbs were wound around the wire, "and about the same sized wire as the strands; were rougher "looking and longer than they are now; I think it was put up "as a sort of partition; I was getting out an old tread power "out of east end of shed, is the way I happened to see them; "this wire separated the cattle part from the part where I

"got the power; I tore my coat on it; Mr. Morley was there; "I think it was in the fall of 1862 that I saw the wire there; "it was the same fall my brother-in-law, J. F. McKay, went to "Ohio." (Record 1416).

S. S. Squires testified: "I was at a fair held at Delhi before "the war; think between 1858 and 1860; I saw a panel of "fence there at the fair; was on two posts, or two posts and "a tree; the barbs were on the top wire, and coiled around; "about same size as the other wire; were some 6 or 8 inches "apart; all of the top wire, or nearly all was barbed." (Record 1472).

James Clugston testified: "Was at a fair at Delhi, on "the Stone farm, before the war; I saw a sample of wire "fence there; was three wires I think, and from 18 to 20 feet "long; top wire was barbed, and if I remember right there "were some on the second wire; the barbs were made of "wire, and wound around the main wire about twice or three "times; Mr. Morley was there and had the fence in charge, "and calling people's attention to it; I talked with Mr. Mor-"ley about the fence at the time." (Record 1393).

Salem Turner testified: "Was at a fair near Delhi be-"fore the war; saw F. B. Doolittle there, standing near what "they called a barb wire fence; was some 20 feet from it." (Record 1518).

We have produced 24 witnesses who saw this Delhi fair barbed wire, and the record shows that they are from our best people. Against this testimony are a few good men, but such have testified only that they attended the fairs at Delhi, and had the opportunity, but did not see this barbed wire. Most of these men, on cross examination, testified that it might have been there and they not have seen it. Others of complainants' witnesses have testified that it was not there, but of all such, the cross examination clearly showed that their testimony was not of much value. Most of them could not remember much of anything that was there, but would

not swear that such *other things* were not there. And when this fact is taken, together with their testimony, that complainants' agent took them out of the district where the suit was pending, to Chicago, kept them there several days, boarded them at the Sherman House, took them around the city to see the sights, paid all their expenses and their *per diem* besides, and then took their testimony there in Chicago, it throws some light on their positive manner of testifying. We think this case of prior use is so clearly proven, that it must prevail.

This same man, Alvin Morley, had two farms about three miles east of Manchester, one north of the railroad and the other south of it; on each of these farms he had some of this same kind of barbed wire, only in small quantity, when he could not well build other fences, or used in patching up fences. He also owned a mill south of Manchester, where he made some of his barbed wire. He also got up a traveling cow pen or pasture, on three wheels, the front one being a castor wheel, into which pen he would put an animal and set his castor wheel so it would describe a circle, the animal's head being towards a bar, and as the animal would reach out for feed, it would push the pen around. He afterwards got it patented. Complainants have introduced the patent of it, which is found in Record, 1958. On the top of one of these pens he had some of this barbed wire, to keep other cattle from reaching over and annoying the animal within; he also had this same kind of barbed wire on a fence at his mill, and some at a cellar where he lived part of his time. All of these different places where he made and used his barbed wire we have for convenience grouped together, and will treat them under the head of

SECOND

MORLEY FARM FENCES.

Ben Shelden testified: "I own a farm of 345 acres; I "owned a farm on the Manchester and Dyersville road; Al- "vin Morley owned land adjoining west of it; I broke my "land next to Mr. Morley's in 1866; fenced it in 1867; some of

"Mr. Morley's fence next to mine when I broke my land was "some of it boards, some poles, some rails and some wire; "there were some rocky places where the wires were; I think "three of these places were from two to five rods across; on "these wires were wires wound around two or three times and "cut off; such are now called barbs; the ends stood out from "a half to three-fourths of an inch, the ends cut slanting; the "fence wire was single and were three of them; I first saw it "in May or June, 1866; this barbed wire was taken away in "1866 or 1867, because when I fenced, the fence was put fur- "ther over on my part and there was no need of it; in 1868, I "was on the ground there, cutting wheat, and ran the reaper "into a piece of this wire; it got into the sickle and stopped "us; there was barbs on the piece that stopped us, and it "broke a section of the sickle; there was six or eight feet of it."

The exhibit marked "Delhi Fair Exhibit," identified by D. S. Potter, is handed the witness and witness asked how it compares with what he saw on the Morley fence, (Int. 51,) and witness answered: "As near as I can remember, I think "they were very similar. I knew Alvin Morley two or three "years; be was a great man for inventions; he had a travel- "ing cow pen or pasture; he had a kind of cap to wear in cold "weather, in blizards; he had another thing he put on his wagon, "then turned his horses loose to feed." (Record, 1251.)

D. S. Potter testified: (His testimony as to this fence is found in our abstract of his testimony pp. 49–50 of this Brief, and on Record, 1225.)

H. L. Bates also testified to this same fence. See our abstract of it, pp. 50–51, of this Brief. (Record, 1327.)

Newman S. Preston also testified to this same fence; see abstract of his testimony p. 57 of this Brief, also (Record 1280).

A. Shelden testified: "Alvin Morley was peculiar about "his living; lived by himself; it made no difference where he "was at night, slept in his wagon, or in an old cabin where

"he was, and used to sleep in his saw mill; it was a pretty "poor place to sleep; he would do his work mostly himself; "his mind run to improvement; his saw mill was run different "from any I ever saw; was always talking about getting "patents; I know the land he lived on west of my brother "Benjamin Shelden's land; he had some wire fence on it; I "was not near enough to see what was on the wire; during "the next season my brother came down where I was at work; "he had a broken sickle; said he run in to some of Morley's "barbed wire and broke it." (Record 1268–9).

J. B. Satterlee, former Clerk of our District Court for eight years, testified: "I knew the Morley land next west "of Benj. Shelden's land; I saw parts of a wire fence along "on the edge of the Morley land, over two or three ledgy or stony "ground; my recollection is it was 19 years ago." (Testimony was taken in June, 1886.). "It was on the fence be-"tween the Morley land and what is now known as the Benj. "Shelden land; the fence was of boards of all kinds, and "where the ground appeared to be too rocky to set posts there "was wire drawn across; there was on these wires what I would "call home-made barbs; I then called them snags; were twist-"ed around the wire in some manner so as to leave two sharp "points of considerable length; I know positively there were "what are called barbs now, on that wire at that time; I at-"tempted to get under one place of it, and a part caught in "the slack of my clothing and detained me somewhat." (Record 1423).

Ichobald McDonald testified: "I knew Mr. Morley "twenty-five years ago; at that time I saw some barbed wire "down at his mill; Morley was there, and two or three others; "I saw it on one side of a cow yard; one cow was inside of it; "it was a smooth wire, and twisted around it was quite a pricker, "I thought, stuck out three-fourths of an inch; the next place "I saw barbed wire east of Manchester on a farm next to the "one Benj. Shelden owns now; the barbs were about the same

"I saw down at that pasture; were made of little round wire; "were twisted around the fence wire; Mr. Morley was there "with his horses, and seemed to be controlling it; it was next "to the road on patches where the old board fence had given "out; couple of places I noticed," (Record 1486).

Vernon Burrington testified: "The first barbed wire "fence I ever saw in Delaware county was that that old Uncle "Morley made; it was between 1858 and 1865, on Uncle Mor-"ley's farm, three miles east of Manchester; Benj. Shelden's "farm was next east of it; the first patch I saw was about the "center of the farm on the east line, another north of that; also "the fence was mended with it along the road; were two or four "wires; Mr. Morley had a portable fence to put cattle into; made "it down to his mill, south easterly from Manchester; I saw a "barb wire on this portable fence; it was a smooth wire with "a smooth piece of wire wound around it, very near the same "size; went twice around it; the ends stuck out about three-"quarters of an inch; Mr. Morley was living at the mill at the "time; he also had a rod, one end fastened to a tree, the other "to a wagon wheel; he tightened his wire that way, and that "he said he put his barbs on; I never see him put them on; "the barbed wire I saw on Mr. Morley's farm, on the patches, "was similar to the barbs I saw down at his mill." (Record 1406).

Charles Towner testified: "I knew Alvin Morley; I "knew of his owning a piece of land east of Manchester, on Dy-"ersville road; was near what was called the Ben Shelden "farm; my father and I did some breaking there for Mr. Mor-"ley; I was nine years old at the time; there was a wire fence "on east side; some of that fence was built of boards or slabs; "we broke right up to that east fence, except in some places "where it was stony; the fence was made of wire, over these "stony places; three wires, I think; the one near where father "was breaking was two or three rods across; I saw Mr. Mor-"ley working at that wire fence; father and I went there to

"see him; he had pieces of wires and two irons, and was twist-
"ing them around the other wires on the fence; twisted them
"two or three times around; the pieces he was twisting around
"was some four or five inches long, and about same size of
"main wire; Mr. Morley called them prickers; the ends of
"the barbs were sharp; after that I saw the fence most every
"day; I saw him working apparently the same way on other
"places; at the place I saw there was two or three rods of
"the barbed wire fence; I believe the first time I saw Mr.
"Morley he had on one of his fixings over his head, he called
"a storm protector; he scared me bad with it." (Record 1430).

P. S. French testified: "I knew Mr. Morley 28 or 29
"years ago; he owned a piece of land on the east side of
"Chas. Grummond's; between the fall of 1861 and 1865, I
"saw a part of a wire fence there; there were on it what we
"now call barbs; it was on an east and west fence next the
"road; was, I think, two wires, and both barbed; the barbs
"about same size as the fence wire; I fix the time between
"'61 and '65, because I then lived north of Manchester, and
"in going to Delhi, went across that way, and then is when I
"saw it; in 1865 I moved to Manchester." (Record 1438).

John Lillibridge, a large farmer, testified: "I knew Mr.
"Morley; I knew he had some wire fence on a piece of ground
"of his right east of Chas. Grummond's; it was on what he
"called a hog lot; the fence was part boards and part wire;
"I see him put barbs on the wire; he cut them off I think
"with a cold chisel; then he put them around the wire; he had
"two pieces of iron, and each had a hole in them; I think he
"saw put these here irons, one of them on each end, and squeez-
"ed them right around them; and them wires was tight and
"would stay right there; they were made of smallish wire; I
"saw quite a number of barbs there; he said if I would go into
"his shop he would show me about it; his shop was a cellar;
"it was before the war; he had a thing he called a traveling

"cow pen, right across the road; it run on wheels; a stick "run across one corner; the cow by reaching over that would "come against the stick, and as the feed got short would push "hard against the stick, and that would roll it ahead so she "could get fresh grass, there was some of his barbed wire on "this pen, with same kind of barbs as on the other fence." (Record 1478).

Johnathan Lukenbill, testified to seeing some of this same barbed wire down at Mr. Morley's mill. His evidence on this wire at the mill, is in his evidence on the Delhi fair wire. See p. 58 of this argument and the (Record 1445).

John Dubois testified that he saw some of this same kind of barbed wire, on the farm of Mr. Morley, east of Mr. Grummond's; was right by the side of a door; kind of a cellar; it was rolled up; this evidence is abstracted with his on p. 54 of this argument, and on (Record, 1498).

H. C. Spangler testified that he saw several strands of wire with barbs on, separating two parts of a straw stable, on the farm of Alvin Morley, east of Mr. Grummond's, about December, 1862, the barbs being the same as those on the Delhi fair barbed wire. His testimony on this fence is abstracted with his in the "Delhi Fair Barbed Wire," pp. 59-60 of this argument, and in the (Record 1416).

A. R. Loomis, a banker of Manchester, testified: "I knew "Alvin Morley a great many years ago and for several years; "at one time he came into my store in Manchester, and had a "small piece of wire in his hand; he spoke of it as being good "for fence; it had on it what he called a barb; he also showed "something he had got up for penning cattle; I cannot fix the "time of his showing this wire, but I think it was during the "war; it was while I was in my store, between 1861 and "1864." (Record, 1489.)

Stephen J. Edmunds, a wealthy farmer and fine stock raiser, testified: "I knew Alvin Morley first in 1856 or 1857,

"on his farm east of that my brother owns and next to the land "Benj. Shelden now owns; I remember seeing a piece of wire "fence on Mr. Morley's east line, next to Shelden's land, about "half way across the 80; I recollect of seeing pieces of wire "on that wire fence; I can't tell how they were fastened on; "they would compare very favorably with the barbs on wire "fences now in general use; this patch of fence was made of No. "8 or 9 wire and these pieces of wire spoken of were of the same "wire; my recollection is there were three wires, and only one "of them was barbed; I think it was in the summer of 1861 that "I saw these barbs on this piece of fence; it was the spring "that Mr. Lincoln took his seat as President; I had been look- "ing up some stray stock; a storm came up; I was driven in- "to Mr. Morley's shanty by the rain; Mr. Morley spoke of "having some improvements in wire fences; my curiosity was "to see what the improvements was, so on my return home "I went quite a little distance out of my way to see the piece "he described or spoke of; that is the way I happened to see "it." (Record 1441).

D. I. Johnston testified: "I knew Alvin Morley; first "got acquainted with him in 1857; knew him 7 or 8 years; "think he made his home at his saw mill, about three miles "southeast from Manchester; I visited him at his mill, when "he was building it; I then and there saw Mr. Morley make "some wire for fences, with barbs or prickers on; it must "have been about 1859; he showed me what he was making; "how he did it; he took a piece of smooth wire and tied one "end to a tree, and one end to his wagon, and that tightened "it, and then he went to work and put those prickers on; "they were of the same sized wire he was using; the strand "was 20 or 30 feet long; he put them on with a couple of "little machines perhaps 10 inches or a foot long; he had little "short pieces of wire; he put one of those little machines on "each end of the short wire, he then turned one one way and "the other the other way; he reversed the turn, one one way

"and the other the other way; he put these pieces on the wire "he tightened up; he turned these prickers around the wire "twice; these prickers are called barbs now; these little ma- "chines were about the size blacksmiths use for tongs; about "such iron as that would be; each one had a hole in the end, "that he put the barb in; I saw some of this barbed wire "there on a calf pen; I also saw some of this same kind "of barbed wire east of Manchester, on the Morley farm, "next to Benj. Shelden; it was in 1860 or 1861; I went there "to buy the land; the fence was of all kinds of material, "boards, rails and wire; where I saw this prickly wire was "on the east side; there were two places of it, that had this "barbed or prickly wire on; he had three wires on these places; "the ground there was rocky; one place about as wide as this "street, and the other not so wide: the barbs on these places "looked about the same as those I saw Mr. Morley putting "on down at his mill in 1859, and put on about the same "way should think; about a year after, I saw those barbed "wire fences next to Shelden's farm again, was in harvest "time; I saw it again two or three times afterwards, when I "was chicken hunting."

The Delhi Fair wire Exhibit is here produced, shown witness, and he is asked how it compares with what he has just been describing, he answers:

"It was a coarse wire like that, but my impression is it "was coarser; the barbs were put on in a coarse manner like "that; these barbs are put on the way Morley put them on, "when I saw him do it." (Record 1372).

M. Eldridge testified: "I lived a half a mile from Alvin "Morley's mill; he had a 40 that the river run through; he "built a dam and had a mill there; had one end done off, and "lived there; I have seen him have wire there on a yard "where he yarded his oxen and cow; I can't tell what he "had on the wire, though I know it was some kind of a "barb to turn stock; he used to be at my house a good deal,

"and talked about making barbed wire to turn stock; I think "it was in 1858 or 1859." (Record, 1555.)

S. R. Young testified: "I knew Alvin Morley many years "ago, from 1858 to 1864; I first saw barbed wire down at Mr. "Morley's saw mill; he had some wire stretched around some "posts; he had some wires of same size twisted around these; "the barbs were, say, a foot apart; the barbs were an inch "long; he carried some pieces of it around to show the neigh- "bors; I saw this barbed wire at the mill, a great many times; "I lived only about a mile from there; Mr. Morley got this "wire up; it was about 1862, or between that date and 1864, "I saw it." (Record, 1453.)

Several witnesses, not here named, whose testimony was given on the Delhi Fair barbed wire, also testified to some of these places of Mr. Morley having barbed wire on, and their testimony will be found in this argument, under that head.

This makes it absolutely certain that this Alvin Morley made and used barbed wire almost exactly like the Glidden wire, the only difference being that it did not have the binder wire.

The testimony also shows that this Mr. Morley was a man of quite an inventive turn of mind; had originated many devices and was nearly always studying on some invention; and that relieving farmers from the great expense of fencing their land was one of his studies. This is further shown by his inventing a traveling pasture, as some called it, which he thought was going to do away with fencing entirely. This cow pen he afterwards got patented, and was his last work before he died, though he had been working on it for several years before his death.

Mr. Bates made said Morley a machine, about 1859, for cutting the barbs, which was a block with a hole about the size of a number nine wire bored diagonally through it, and at the end of the block he had a steel face attached to the block through which the wire passed which was run into

the block for cutting into barbs: a shear knife was fixed to a long lever which passed down by this steel plate on the end of the block, making, with the lever and steel plate, a pair of shears that cut the barbs. These barbs being annealed, were by Mr. Morley placed on this wire

In all, we have thirty-eight witnesses who have seen Mr. Morley's barbed wire at these several places named, and the character of the witnesses places the matter beyond doubt that this man Morley had this barbed wire, and in a small way was making and using it right in this vicinity, and it is absolutely certain that this Mr. Morley had this barbed wire from 1858 to 1867. We think the court ought to take into account the fact that all our testimony is taken right in the county, and in the immediate vicinity of each fence on which we show barbed wire, so that it was easy for complainants to prove want of character or good reputation in any or all our witnesses, which they have not attempted to do. While all of the witnesses on the part of complainants (except six in the east) were taken to Chicago for examination, so that it would be impossible for us to learn anything about admissions or the character of many of them, and if they should testify falsely, we would have to go to Chicago to prosecute them. And it is wonderful how a free trip to Chicago, and a visit there to see the sights at the expense of complainants, would revive the memories of *some* of them.

As against all this positive proof on this Morley wire, complainants have brought forward a number of witnesses to try and contradict ours. The Record shows that every one of such witnesses who have any standing at home, and who are entitled to any credit, only testify that they did not see the wire, or had no recollection of seeing it. And it seems to us that this is all that an honest witness could testify to, unless his attention was called to it. The witness for complainants, who they have shown had the best opportunity to testify in regard to this Delhi fair fence, is J. L. McCreery, of Wash-

ington, who edited the Delaware Journal, at Delhi, from the spring of 1859 to 1863. He says he was diligent in picking up items for his paper, and at the fair on Andrew Stone's farm, in 1859 and 1860, was on the ground nearly all the time, each day of the fair, for the purpose of gathering items, &c.

He says he did not see any such thing as this barbed wire exhibit at either of those fairs; says possibly there were fairs there after 1860, but it seems that complainants have a part of a copy of his paper mentioning the fairs in 1859 and '60, but for no other year, which seems to be the reason he can tell nothing about any years but those two. When his attention was called to an item in the 1859 issue, stating that he was on the fair ground only about two hours the second day, and could not tell about that day, he said but for that he would have said he was there all of the second day, showing that his memory cannot be relied upon. He cannot remember anything exhibited at either of those two fairs. He also testifies that this barbed wire might have been at one of those fairs and he not have seen it; being an honest man he answered honestly. Of the same character is the testimony of F. B. Doolittle, S. F. Parker and Dr. Boomer; neither of these witnesses swear positively that this barbed wire exhibit was not there, but simply that they did not see it, or had no recollection of seeing it. Mr. Doolittle don't remember of seeing this wire, yet we proved by S. Turner, on sur-rebuttal, that he saw said Doolittle at the fair where this barbed wire was, and he, Turner, was close by the wire, and Mr. Doolittle was near it; of course he don't know whether Doolittle saw it or not. (Record 1519, Int. 7, 8 and 9.).

The testimony of Dr. Boomer is to the same effect, that he did not see this barbed wire, either at the Delhi fair, or at either of the places of Mr. Morley's. We call special attention to the testimony of this witness. Now note the manner he testifies; while giving his opportunities for seeing it, he testifies that he has no recollection of seeing it there, but *advanc-*

es the statement that it *might have been there and he not see it.* We submit that this is absolutely all that a fair, honest, intelligent witness will testify to. Dr. Boomer also testifies that Mr. Morley's mind ran in the direction of economy in everything, in living, building, and so on. (Record 165, Int. 16).

This shows, as we claimed, that Mr. Morley was always trying to lessen the expense to farmers in fencing. Geo. Long, another of complainants' witnesses, also testifies that his mind ran to building cheap fences.

We cannot review the testimony of all of complainants' witnesses, touching these Morley fences, but must notice some of it. This cow pen structure was patented by this Mr. Morley, and the patent has been introduced in this case, for the purpose, we suppose, of showing that there was no barbed wire on it. We never claimed that barbed wire was a necessary element in its structure. Morley only used barbed wire on it while he was experimenting with it. There must have been many of these fences built, for some of the witnesses on both sides tell of seeing one at Morley's mill, one in Delhi township, built of poles which he saw a horse kick all to pieces; after this one of boards was seen on Morley's land; one seen in Milo township, and one seen at Delaware Center. From 1861 to 1867, the time Mr. Morley left, he was experimenting on this cow pen, and it seems that when he perfected it, he dropped his barbed wire invention. The members of Mr. Morley's family, all living in the east, are called on, but all they testify to is that they never heard that Mr. Morley had any barb wire, never saw him have any and never heard him talk about it. Most of them admit they never heard him talk about his fences in the west, so of course it is not strange that they never heard him talk about his barb wire, as they saw but little of him, for he spent most all of his time in Iowa. An attempt is made to show that this Morley was insane. How this can help complainants we fail to see. Many an inventor has gone insane. Even Goodyear was called

insane for many years before he completed his great invention, Morley seems to have been sane enough to take care of himself. and earn much property to divide amongst his children, who don't seem to have the same faculty to make money that their father did. The son, Frank, who claimed to know most about his father's business, and who got the old farm in Pennsylvania, and in 25 years had added only 15 acres to it, and that, too, after his father gave him some western land. Morley was thought sane enough to give these children a good title to their lands, and to buy and sell lands, and after he had divided up his accumulation of years among his children, they get him into the State Lunatic Asylum at Harrisburg, an ungrateful act, as their father was always harmless.

The various witnesses in Iowa who testify to his insanity, admitted that he was sane part of his time, and good at a trade; many of them had traded with him; some said he was very sharp at a trade. One thing is certain, he always took care of himself and made money, and originated many new and useful devices which the world is having the benefit of now, and probably some unscrupulous man got patented as his own. That he originated the band saw, corn planter, sorghum cane burner, broom fastener, and face protector, is not denied; in fact, some of complainants' witnesses testify to the same thing. He was close in money matters, which witness Lewis testifies is the reason he did not get his inventions patented, his letter to commissioner shows this. It is impossible to read all the testimony taken in connection with this man, Morley, without being impressed with the belief that he was competent to and did make barbed wire.

After a careful perusal of all the evidence of complainants in rebuttal, we ask where there is any testimony entitled to credit that contradicts the positive testimony of any or all of the thirty-eight witnesses of defendants, who have testified to seeing this Morley barbed wire?

This case of prior use to us seems to be clearly and satisfactorily proven, and this is the view Judge Shiras took of it, and on this testimony held the patent in suit void and dismissed the bill. The fact that this case was tried at Dubuque, an adjoining county to Delaware, where this Morley fence was, would raise a presumption at least that the Judge had some knowledge of the standing of defendants' witnesses.

We next call attention to

THIRD.

The Hutchinson Fence.

In the year 1869, some wires were put on a fence on a farm owned by Henry Hutchinson, about three miles south of Manchester, in Delaware county, Iowa. Mr. Hutchinson was then living in Manchester, was a merchant here then, is now a banker. His son and nephew put the barbs on with tools made for the purpose; put upon each of four wires, and there was about forty rods of it barbed.

Joseph Hutchinson testifies: "Am cashier of Henry "Hutchinson's bank; Crawford Hutchinson is a cousin of "mine; he worked for my father on his farm south of town, "for some years; he quit on the 13th of November, 1869; I "remember buying some staples which Crawford and I twist-"ed around some wires and made barbed wire fence of; it was "the first that was put on that farm; was over a water run "about the center of the farm, on the east side; we also barb-"ed on the south fence, across a 53-acre field; we barbed "along the west road; I have in my possession a piece of barb-"ed wire taken off from my father's farm, which I helped to "barb when Crawford Hutchinson was there; it came off the "water run; Crawford told me where I would find it, during "time testimony was being taken, and I went down and found "it." This piece of wire identified by this witness, Joseph Hutchinson, handed to notary, introduced in evidence and marked "Hutchinson's Exhibit of Barbed Wire." (Record

1865). Joseph Hutchinson recalled: "I have been over the "ground again to-day, along the east line between father's "land and Thomas Boyland's, and I find there has been a "change in the creek between 1869 and this time, so far as it "crosses that line is concerned; where the creek then run, it "was under father's part of the fence; where it now runs, is "under Mr. Boyland's fence." (Record 1594).

Crawford Hutchinson testified: "Am a manufacturer, "and reside in Manchester, Iowa; I did work on Henry "Hutchinson's farm from 1864 until September, 1869; while "I was working on that farm, I put some wire barbs on the "fence, which was strung along on posts and was made of "smooth wire; the barbs were a piece of wire like a staple, "sharp at each end; we put them on with a pair of pinchers, "larger and heavier, but similar to those used in ringing hogs; "they were put on for Henry Hutchinson; as I recollect it, "Joseph Hutchinson and I worked at it by spells; only one "could work at a time, as we had but one pair of nippers; I "can't tell the year we put them on, but it was in 1868 or "1869; I know that it was before September, 1869, because "I, at that time, left Henry Hutchinson's farm, and have never "worked for him since; we barbed the east and west fence on "the south side of the farm; put the barbs 6 or 7 inches "apart; were twisted around the main wire a single turn; Jo- "seph, who helped me, was 17 or 18 years old; the ends of "the barb stuck out about half an inch; think there were "three or four wire strands on the fence; Henry Hutchinson "is my uncle and Joseph my cousin." (Record 1859). On being recalled, he further testified: "I think there were four "wires on the fence and we barbed them all, and there must "have been about 30 rods in that portion we barbed."

An exhibit introduced, called the "Hutchinson Barbed Wire Exhibit, No. 2," handed to witness, and he is asked if he has seen it before and where it came from; (Int. 32, p. 1670 of Record); he answers: "I have seen it before; I know it

"by a file mark I made on it; it came off the fence on the "Hutchinson farm, north and south near pair of bars, three "quarters of a mile south of northeast corner of home forty; "the wire this was taken from was 24 feet long and on top of "fence; the balance of the 24 feet was just like this, barbs and "all; this exhibit is quite similar to that I helped make on that "farm in 1869."

Another exhibit, the "Hutchinson Barbed Wire Exhibit," handed witness, to which he testifies: "I saw a barbed wire "similar to this exhibit over the creek when I was down there "on 25th June last; there was about 10 or 12 feet of it; the "wire was the same as this last exhibit." (Record 1667).

Henry Hutchinson, banker and farmer, testified: "Have "owned a farm of 333 acres, about three miles south of Man- "chester, for a good many years; bought parts at different "times and from different parties; it is now mostly fenced "with barbed wire." The exhibit marked "Hutchinson Barbed Wire Exhibit" handed witness to examine, and he is asked: —Int. 7—"Have you ever seen anything of the kind before, and if so, where?" to which he answers: "I have on a part "of my said farm; I had smooth wire formerly upon it, most "of which was at different times barbed similar to this said "wire now before me; I understand that my son, Joseph "Hutchinson, delivered it here; I first had that smooth wire "barbed in 1869; was first barbed in summer of 1869, by my "nephew, Crawford Hutchinson, and Joseph Hutchinson; they "were together; were working and living on said farm at the "time; Crawford quit work for me in the fall of 1869; we mov- "ed onto the farm in 1870, and these barbs were put on by "Crawford before we moved onto the farm, and while he was "working for me; some were put on by Crawford on the "south fence, south line of homestead 40; were put on with "nippers; some were put on where there was a hollow and a "creek running through it, and some on a dry creek on north "side. The course of the creek on our east line next to Boy-

"land's has been changed; before 1870 the creek run different "from where it does now." (Record 1551).

Elizabeth Hutchinson testified: "Am wife of Henry "Hutchinson; we moved onto our farm three miles south of "Manchester, in 1870; I remember it was then because our "youngest child was born in November, 1869. and he was a "baby when we moved onto the farm; Crawford Hutchinson "worked for us and left in the fall of 1869." Exhibit marked "Hutchinson Barbed Wire Exhibit" handed witness and she is asked if she ever saw anything like it before. (Int. 8.) She answers: "I recognize it as being exactly like that which the "boys put on as far back as 1869; when I first saw it was "when they brought it to the house to show the manner and "workings of the pinchers and barbs on a piece of the wire; "the house they came to was here in Manchester, and the boys "were my son Joseph and my nephew Crawford." (Record 1447).

J. J. Cleveland testified: "I know the Henry Hutchinson "farm, 3½ miles south from Manchester; I lived about 160 "rods from it; I used to travel along the creek that crossed "that Hutchinson farm, trapping in winter and spring, and in "fall and spring was over there shooting ducks; I was on the "place a good deal working for Mr. Hutchinson; I was there "last some two weeks ago; there has been a change in the creek "bed there at the line where it runs from Mr. Hutchinson's "on to Mr. Boyland's land; it used to run some 20 feet farther "north from where it now runs; when I used to cross, there "were two or three wires and a pole across the creek; I was "crossing it once with my gun and got tangled up a little with "the barbs; I think the first barb wire I ever saw was on that "Boyland and Hutchinson line fence; it was barbs put on a "single smooth wire; the place that I distinctly remember of "seeing this barbed wire was on his east and west fence, on "south of his home forty; I think it was shortly after Mr.

"Hutchinson moved down there; the creek has changed its "bed for a long distance." (Record 1661).

P. H. Warner testified: "Am Deputy County Surveyor "of Delaware County, Iowa; I knew the Henry Hutchinson "farm, 3½ miles south of Manchester; I was recently there "with Joseph Hutchinson examining the bed of the creek "there; particularly at the line between Mr. Hutchinson and "Boyland; I examined a place that had the appearance of "being a former bed of the creek; I made a measurement and "plat; I now have the plat and measurements." Defendants' counsel offers this plat in evidence, to be marked "P. H. War- "ner's Plat Exhibit." See (Record of Plat, 2016.). "The "appearance of the ground would seem to indicate that "the stream at some time had run as indicated by brown line; "the measurements on the plat are correct; the two posts "seemed to indicate the division of lines in partition fences; "*c* represents the south post, and *b* the north one; the north "division fence is attached to north post, and south one to "south post; the creek now runs under south division fence, "and 26 feet south of division between the two fences; as in- "dicated by the map, the stream formerly run 40 feet north of "these division posts."

Exhibit "Hutchinson Barbed Wire Exhibit" is shown witness, and he is asked if he saw any like it there now, to which he answered:

"Yes sir, I saw wire I think was like this, from the ap- "pearance; the two upper wires extending across the creek, "as it now runs, were spliced at the north end, near post *c*, "with this kind of wire; and another piece spliced with the "wire extending past post *c* to *b*, were of this kind." (Record 1600). We cannot well reproduce the plat in this argument, so ask the court to look at it in (Record 2016).

Salem Turner testifies: "I once lived on the farm of "Henry Hutchinson, 3½ miles south of Manchester; the farm

"west of, and adjoining the Thomas Boyland farm; I moved "there in the fall of 1876, and remained there six years; "Chas. N., my son, lived there with me and worked for Mr. "Hutchinson; Mr. Hutchinson, during the time lived in Man- "chester; I knew where the division of fences was between "Mr. Hutchinson and Mr. Boyland; I repaired Mr. Hutch- "inson's part, about a week after I went there; for four or "five rods there, there was no barbed wire fence; after we "got to the bank he had 2 or 3 barbed wires; don't recollect "whether the top was smooth or barbed, there was a creek "there and it then ran through north of the division and under "Mr. Hutchinson's fence; now the creek runs south of there "and under Mr. Boyland's fence."

The "Hutchinson Barbed Wire Exhibit," is handed witness, and he is asked how it compares with the barbed wire he saw there when he lived there, (Int. 20), he answers: "Why, I would say it was the same kind of wire on Mr. Boy- "land's part of the division fence, while I lived there." (Record 1625).

Chas. N. Turner testified: "I knew the Hutchinson "farm, 3½ miles south of Manchester; I lived there about 5 "years with my folks, from the fall of 1876; I helped father "fix the fences; I knew the part kept up by Mr. Hutchinson "and that kept up by Mr. Boyland; have been there "lately; the creek don't run there now as it did when we lived "there; Mr. Hutchinson kept up the fence north of the dou- "ble post, and Mr. Boyland south of there; the creek used to "run north of them, now it runs south of them; while we were "there the fence of Mr. Hutchinson's, north of those double "or division posts, were wire; 2 or 3, and barbs pinched onto "them, and a pole at the top."

He examines this "Hutchinson Barbed Wire Exhibit," and says: "It looks to me like the same wire that was on the "fence when we went there; there was none of this kind of "barbed wire on Mr. Boyland's part while we lived there;

"when I was down there on the 17th of June last, there was "some barbed wire on Mr. Boyland's part that looked just "like this." (Record 1617).

Mrs. Minnie Young testified: "I am daughter of Salem "Turner and lived with him on the Hutchinson farm, three "and a half miles south of Manchester; lived on the farm "with them after 1876; during all the time we lived there, I "was familiar with the creek; was there often and knew where "the creek run under the division fence, next to Mr. Boyland's. "I was there a few weeks ago; now that creek runs from the "Hutchinson land onto Mr. Boyland's land, some 25 or 30 feet "south of where it did when we lived there." (Rec. 1773).

S. R. Young testified: "Know the Hutchinson farm "three and a half miles south of Manchester; I join farms "with that; I know the Thomas Boyland 40; some 18 to 25 "years ago I used to pass along there every day for months; "I have lately visited the Hutchinson farm; the creek didn't "run then where it does now; it has changed about two or "two and a half rods from where it was 20 years ago; then "the water was north of the stakes; now the creek runs south "of them." (Record 1702).

D. F. Young testified: "Know the Hutchinson farm "three and a half miles from Manchester; father's farm join-"ed it; I have lived there 27 years; I know the creek that "runs under the line fence between said Hutchinson's farm "and Thos. Boyland's; the creek now crosses the line some "two or three rods south of where it used to; the creek now "runs as it is shown by the Warner plat; the creek now cross-"es where the green line is on that Warner plat; it used to "run where the brown line is." (Record 1609).

Henry Quitmire testified: "I know the Henry Hutchin-"son farm, three and a half miles south of Manchester; I liv-"ed on that farm two years and seven months; I moved there "three years ago last March; I helped take off some barbed

"wire from the line fence between Mr. Hutchinson and Mr. "Boyland; I took it off for Joe Hutchinson." This exhibit is here shown the witness, and he said "I have seen that same "wire, 'cause I took it off. The creek does not run now "where it did; the first spring I went there my boy and I dug "a ditch because the land was so wet; after that, it ran south "and under the Boyland division of fence; before that, it ran "under Mr. Hutchinson's part; the wire I took off had barbs "pinched on; the balance of the strand had same kind of barbs "pinched on; this wire was all there when I left the farm, ex-"cept what I took off; the wire was single with barbs pinched "on." (Record 1788).

L. W. Quitmire testified: "Am son of Henry Quitmire; "know the Hutchinson farm; the channel of the creek is not "where it was when we first went there; it is now about three "rods south of where it then was; we dug a channel up "through west of it, which caused the change." (Record 1828).

S. R. Young, recalled, testified: "I have seen my ac-"count book and have it here; in it is this memorandum: "'September the 20th, 1869, agreement made with Crawford "Hutchinson, for $15 per month, washing and mending done "for him.'" (Record 1820).

We think the testimony here conclusively shows that a barbed wire was made and used on the Henry Hutchinson farm, near Manchester, Iowa, in 1869, four years before J. F. Glidden claims to have commenced even experimenting with his wire. It is a single wire, but has the same kind of barb Mr. Glidden shows in his drawings of his November 24 1874 patent, (see Record 1940) that is, the barb is coiled but once around, as there shown; it contains every element of this Glidden wire except the binder wire and the twisting, and those are shown in the M. Kelly patent of February 11, 1868, (Record 2001) which anticipates the Glidden patent. We have produced two exhibits of this Hutchinson wire, marked

"Hutchinson Barbed Wire Exhibit," and "Hutchinson Barbed Wire Exhibit, No. 2," as they are not shown by diagrams, but are with the Clerk. We call the attention of the Court to them, and ask that they be sent for, for examination, when the Court is investigating this instance of prior use. Complainants have made but little effort to contradict this fence. The only real attempt was a technical one, by producing two or three witnesses who testified that there was no barbed wire over the creek, at a later period, and Mr. Boyland testified that there never was any, where the creek now runs, and that the fence there is on his part. That is the reason that we have shown so fully that the creek does not run now where it did when these barbs were put on, but even Mr. Boyland doesn't pretend that there was no barbed wire on Mr. Hutchinson's part, and no witnesses whatever to contradict the fact that barbed wire was, in 1869, put on Mr. Hutchinson's south fence. It is another clear case of prior use, and only shows that barbed wire was being used quite extensively in Delaware county long before Mr. Glidden commenced to experiment with barbed wire.

The testimony of all of these witnesses was taken at Manchester, within three and one half miles of this fence, while all the witnesses called on to contradict it were taken to Chicago and there gave their testimony. One of our witnesses, Henry Quitmire, testified that Mr. Husted, who was complainants' agent to hunt up witnesses, wanted him to testify about this barbed wire there; offered to take him to Chicago, pay all of his expenses, then take him to a theater (feater, he calls it) and give him plenty to drink. Int. 8, 15, 16, 36, 50 and 51. (Record 1788-1792). We think this shows why complainants have taken their testimony in Chicago, instead of the vicinity where this fence is. We submit this fence in full confidence that it must be sustained.

The next case of prior use is also a Delaware county fence, viz:

FOURTH.

The Long Fence.

W. H. Long, a wealthy farmer living north of Delaware Center, and about five miles northeast from Manchester, in Delaware county, Iowa, made some barbed wire fence, in the spring and summer of 1873. He put the barbs onto smooth wire; made them out of staples, with two irons having holes in the ends of each running down into the irons from the ends longitudinally, of a little larger size than the staples to be used, and of the depth of the prongs of the staples. These irons differed from Mr. Morley's, before described, as his irons had the hole crosswise of the iron and a shoulder on them, while these irons of Mr. Long's were simply straight, round irons, with a hole from the end down lengthwise into them. With these, he, his son and hired man commenced barbing smooth wire in front of his house, in the spring of 1873.

W. H. Long testifies: "I built barbed wire fence on my "farm; the first was in the summer of 1873; it was on a forty "in front of my house and it run onto another forty; I put "some on other places; I made a feed yard on that forty "made of two barbed wires; was in northwest corner of for- "ty; I had a board fence on the west side, next the railroad; "I put the smooth wire on first and the barbs on afterwards; "on the south side was a smooth wire with some barbs on; I "commenced before harvesting and haying; there were some "places on the west fence I put barbs on, but it was not that "summer; I built some barbed wire that summer on a forty "southwest of the one I have been talking about; it was about "80 rods long; it was smooth wire, with barbs on to keep cat- "tle back; I put some of the barbs on, Albert Billings, who "was working for me, put on some, and my son, A. D. Long, "put on some; that was all except one or two who came along "and put on some to try it. The barb we put on was a two- "pointed barb, made out of a common staple; I had two irons "made, with a hole in the end, like a lead pencil with the lead

"out; Chas. Moore, a blacksmith of Delaware, made them; "I put the staple over the wire; put the two irons, one on each "point of the staple, and drew them in opposite directions "around the wire; then I took a hammer and an old flat iron, "and putting the wire under, I struck it with the hammer; "this left the points of the barbs in opposite directions; the "handle was broken off the flat iron, and there was a sand "hole close to the piece of the handle left on, and that hole "and piece of a handle helped me to hold the staple in place "and I struck with the hammer and fastened it; these staples "were not all of same lengths, so the barbs were not all of "same lengths; I don't know where those irons are; I gave "them to an attorney in a barbed wire case, that the grangers "had one side of; he claimed he was looking up evidence in "a wire suit; his name was Garretson; I gave the flat iron to "a man who was with him; he said he was interested in the "manufacture of barbed wire; I think I commenced the last "of May or first of June, 1873; I have some of that barbed "wire on my farm; the most of it is there, except what has "been carried off by barbed wire men; Mr. Millington, the "agent of the Washburn & Moen Manufacturing Company, "who now sits in this room, was out to see me twice about "this barbed wire; the first time was in haying; the last time "was some five or six weeks ago; the last time, he said he "was there to talk on the barbed wire business; said he had "been out to see Mr. Moore, who told him differently about "those tools than I did in haying time; he said if I didn't look "out they would have me up for perjury; he repeated it sev- "eral times, but said he would pay all expenses if I would go "before some magistrate and fix it up; go before the proper "authority and take oath about the matter; he meant that he "wanted I should make an oath that I had not made the fence; "my wife heard part of the conversation; he said if I went on "and got into the higher courts I knew what the consequences "would be for perjury; I have nine eighties in my farm." (Record, 809.)

Mr. Long went home and got a piece of the wire, and was again put on the stand, and after his cross examination, consisting of 361 cross interrogatories, and lasting two days, he testified on re-direct: "I have got a sample of the barb wire "made by me with those irons, in the spring of 1873, and now "here produce it." (Sample is now produced, marked "Defendants' Exhibit A.") "The sample I produce was barbed "some time in the spring of 1873; I have a deed with me that "helps fix the date of when I commenced barbing that wire; "my hired man, Albert Billings, commenced breaking that "land when he was there, and it was the next year after I "bought it; the deed is dated July, 1872. The sample of "wire I produce has some other barbs on it besides what I "then put on; they were afterwards put on with pinchers; "about half are put on with pinchers; they stand out straight-"er than those put on with those irons, are more uniform and "nearer alike; those put on with the irons, some are drawn "over too far; they show that they have been struck with a "hammer and are bruised." The deed is produced and offered in evidence and marked "Defendants' Exhibit B." (Record 809 to 849).

A. D. Long testified: "W. H. Long is my father; I lived "with my father in 1873; about the last of May or first of "June, 1873, father put barbs on a wire fence, on a forty "south of the house; it was on about sixty rods. He "had a couple of long irons with holes in the ends, and "twisted on wire staples; used to fasten wire to posts; Albert "Billings and myself helped him do it; it was in the spring "after father bought that eighty on the west; (refers to the "Dunham eighty that his father referred to) he also bought a "Marsh harvester that spring; besides those irons used to "twist the barbs on, he used a hammer and a broken flat "iron; we used the flat iron to hold on one side of the barb, "and struck on the other side with a hammer; there was a "hole in the flat iron into which we placed the barb to hold it "when we struck it with the hammer; the staple was put

"over the wire; the ends of staples were put into these holes "in the irons; were then twisted around the wire; we then "used the flat iron and hammer; holes were in the end and "run lengthwise of the irons; I have a piece of wire we barb-"ed then and produce it." It is offered in evidence and mark-ed "Defendants' Exhibit C." (Record 850).

Albert Billings testified: "I came to Delaware county in "the fall of 1872 and worked for W. H. Long in 1873; com-"menced about the first of March; it was the first work by "the month I did after I came out here; I helped Mr. Long "barb some wire on the 40 in front of the house, that sum-"mer; it was before harvest; it was a wire some sixty rods "long and on top of the board fence next the railroad track; "I helped and Mr. Long helped put the barbs on; we used "two little irons with holes in the end; we put the staples over "the wire and with the irons twisted these staples across the "wire; we tightened them with an old flat iron and a ham-"mer; it was done before July." Here "Defendants' Exhibit C" is shown witness, and he is asked what it looks like. He answers: (Int. 29, Record 868) "It looks a good deal like "the barbs we put on the wire for Mr. Long, in 1873; I saw "Mr. Millington some 3 or 4 weeks ago; I didn't have much "conversation with him; we talked about when I came here; "he wanted an affidavit; I didn't give one." On re-direct he testified: "I think there was a feed lot built on that 40 in the "summer of 1873." (Record 1866 to 1883).

George P. Blaisdell testified: "I know W. H. Long; I "lived about a half a mile from him in 1873; I heard Mr. "Long tell about making barbed wire and saw him at work "at it; it was in 1873; it was a part board fence and part "wire; there were barbs put on the wire; it was latter part of "spring or fore part of summer; I examined the barbs; they "looked like staples twisted around the wire; I saw Mr. Long "at a distance, putting them on; this was on a 40 south of his "house; was on the west side; I took hold of the barb when

"I examined it to see how tight they were on; I should think "it was a long string of fence; there was a feed yard in there; "should think there was from an acre and a half to two acres "in the feed yard; I know it was in 1873, because it was the "next spring after Mr. Pitkins moved away; he moved away "in the fall of 1872, and I know it was while Al. Billings "worked for Mr. Long. I remember the time Mr. Pitkins "moved away, my wife being sick; I carried her out of her "room to see them get ready; my youngest child was six "months old when my wife was sick, and she was born 14 "April, 1872." (Record 883).

Ezra Coates testified: "I know W. H. Long; Mr. Long "barbed the first fence that I saw, next to the railroad; as near "as I can recollect it was the spring after Mr. Pitkins moved "away: it was on W. H. Long's farm; I saw it; it was in "the northwest corner of the piece of ground in front of his "house; when I first saw it, Mr. Long was there; he was "clinching them on with a hammer and a wedge or some-"thing; they were already on; it was in the spring; Mr. Pit-"kins moved away in fall of 1872; he sold his farm in the "summer to W. H. Long, and moved away in the fall." (Record 1010).

Joseph Long testified: "I am 74 years old; W. H. "Long is my son; I live four miles from him; I own two "farms; I have seen barbed wire fence made; the first I saw "was on W. H. Long's farm; I mean my son; he had a cou-"ple of irons with holes in the end, and put those irons on "the ends of the staples, and pressed them around the wire, "and made the barbs that way; I didn't see him put many on, "he just showed me how he done it; I can't tell when it was; "I know it was warm weather." (Record 1019).

Chas. A. Billings testified: "I was working on Jerry "Shade's farm in 1873; I rented in the fall of 1872, and left "there in the fall of 1873; Mr. Shade's farm was about a mile "from W. H. Long's place; I knew Chas. Moore, of Dela-

"ware, a blacksmith; he bought the Shade farm while I was "there, and went onto it before I left, in 1873; Mr. Moore had "part of the hay that year; I have never been on the place "since the winter of 1873." (Record 1596).

L. Webb testified: "I am a jeweler; live in Manchester, "Iowa; I used to live about 3 miles north of Delaware; lived "there up to the fall of 1879; I knew Albert Billings, in that "neighborhood; he is a cousin of mine; he went into that "neighborhood in the fall of 1872, and he worked in the year "1873, for W. H. Long." (Record 1869).

L. Webb, recalled, testified: "I know Chas. A. Billings; "he is an uncle of mine; he lived on a farm of Jeremiah "Shade, one year; I threshed for him, that fall; Mr. Billings "and Charles Moore hauled the grain away from there." (Record 1597).

T. N. Sedgwick testified: "In 1872 and 1873 I lived on "my farm of 320 acres, about three miles northwest from the "farm of W. H. Long; in 1873 I saw some wire fence on W. "H. Long's farm; it was one strand: there was on the wire "what I call fence staples; it was on the 40 south of the house; "these staples were put on very bungling; suppose they were "put on there to stop cattle; this wire was on top of some "posts, and boards nailed on under; three or four boards; "think the board fence ran clear across the 40; I did not go "down the fence to see how far the wire went on it; it was "the north end I saw; it came right up to the road; it was on "the east side of railroad track; I should call those things on "the wire, barbs; I went and looked at these barbs; took "hold of them; my impression is they were not very tight; I "saw those barbs on that fence about first of July, 1873." (Record 1359).

James Clugston testified: "I saw barbed wire on Henry "Long's fence about 1872 or 1873; it was on a lot across "the road from the house; on not a very large yard, proba-"bly used for a cattle yard; the barbs I saw there were fence

"staples twisted around the wire; should think I saw what "was on the south and east side of the yard; I lived about "five miles from Mr. Long's." (Record 1395).

Joseph H. Long recalled, and testified: "Since I was on "the stand before, I have looked at some memoranda books, "and find that George Hegwood worked for me in 1870 and "1873." (Record 1079.)

George Long testified: "I am a brother of W. H. "Long's; I live about 50 rods from him; I have a recollec- "tion of my brother, W. H. Long, putting some barbs on a "smooth wire, near the railroad track; it was in the summer "time; warm weather; but I am unable to fix the year; my "memory is too poor on dates; my brother put those barbs "on with tools made for the purpose, by a blacksmith in Del- "aware; they resembled an ordinary leather punch, only long- "er; some 6 or 8 inches long, and about half an inch thick; "there were holes in the end large enough to receive an ordi- "nary fence staple; after the staple was put over the wire, "the tools were placed on the ends of the staples, then by "crossing the tools past one another, the staple was wound "around the wire; I first saw these tools in Chas. Moore's "blacksmith shop; Mr. Moore asked me to carry the tools to "my brother, and I did so; it was the next day after I carried "the tools to my brother that I saw him use them; I remem- "ber Albert Billings was with us at the time; I remember that "afterwards I saw considerable of that kind of work on his "place; the fence I saw him put them on was next to the rail- "road track; there was a feed yard made in northwest corner "of that lot." (Record 998).

Harrison Wilson testified: "I am a merchant; live in "Greeley, Iowa, north of Delaware; I know the railroad "built through Delaware County, Iowa, and running through "Greeley, was, when built, the Davenport & St. Paul, and "now is the Chicago, Milwaukee & St. Paul railway; Greeley "is nearly due north from Delaware station, on that road; I

"have the exact date that the first locomotive crossed a cer-"tain street in Greeley; it was November 2nd, 1872." (Record 1533).

Nathan Scofield testified: "I know the Davenport & "St. Paul railway, and now the Chicago, Milwaukee & St. "Paul railway; I live at Strawberry Point, in Clayton Co.; "am a merchant there; it is a station of that road and north "from Delaware; the cars commenced running on that road "to Strawberry Point by December 1st, 1872; I was a car-"penter then, and built a house at Edgewood, which is north "of Delaware station; I completed the house on 10th Decem-"ber, 1872, and I rode on the cars once or twice before we "finished the house; I afterwards commenced work at Edge-"wood, in Mr. Noble's store, before Christmas of that year, "and I rode down from Strawberry Point; also, on the 6th or "7th of January, 1873, Mr. Bushee had two car loads of hogs "frozen at Edgewood." (Record 1509).

We have thus shown this Long fence, by all of Mr. Long's family, his hired man and all of his nearest neighbors, a complete case of prior use, the barbing commencing more than a year before Mr. Glidden's patent, sued on herein, was issued, and several months prior to the time Mr. Glidden filed his application for a patent. He claims he invented his wire in October 1873, or rather then experimented with it, but the proof in this case shows that before he commenced with his barbed wire, Mr. Long had already made some. We have two exhibits showing this wire. They are marked Exhibits "A" and "C." They should have been called the Long Barbed Wire Exhibits, thus confusion would have been avoided, but were put in when we commenced taking testimony, and we did not then see the necessity of a better name.

The main defense to this case of prior use, was to try and show it must have been later than claimed by Mr. Long, but they have signally failed in this. The abstracting of the testimony of Chas. A. Billings, L. Webb, Harrison Wilson

and Nathan Scofield is rebuttal to the testimony of complainants on this point. Their testimony is not yet abstracted, and perhaps will not be, but if it is, then this testimony fixes the time certain. It was first claimed that the railroad was not in operation until after 1873, hence no need of a railroad fence, and that Albert Billings worked for Mr. Long later than they claimed, but the evidence is positive that Albert Billings worked for Mr. Long in 1873, and not after. Mr. Moore, brought from Colorado, claimed that he didn't remember making the irons, and that he worked in his shop after 1873, but the testimony of W. H. Long and George Long shows that the irons were got in 1873, and that of Chas Billings and L. Webb shows that Mr. Moore moved onto the Jerry Shade farm in 1873, so that every point attempted by complainants, on the question of time, is successfully met. No effort was made to show that Mr. Long did not barb these wires; we think, therefore, that instance of prior use is clearly proven. We have taken the testimony of many other witnesses to show the existence of two other barbed wire fences in Delaware county, Iowa, prior to October, 1873, but we think it useless to refer to it, as the several instances we deem sufficient, and more will not help any, but it shows that barbed wire fences were fast going into use in said county before Mr. Glidden pretends to have been an inventor. We will close this subject of prior use by referring to another case in Mr. Glidden's own neighborhood, viz.,

FIFTH.

The Beers Fence.

In the immediate neighborhood of Joseph F. Glidden, this pretended inventor, barbed wire was made by E. A. Beers, on his father's farm. The first made was by putting wire barbs on a smooth wire. Afterwards, in 1859, a twisted barbed wire was made by the same man and used on same farm, and it contained every element of this Glidden wire, and is doubtless where this Joseph F. Glidden got his idea from, to

make his wire. The fact that this man Glidden is not produced as a witness in this case by complainants, to contradict this theory of his getting his ideas of barbed wire from Mr. Beers, and some other proof that shows very positively that he knew of this same kind of barbed wire before he pretends to have made any, suggest the idea that it would be unsafe to use him as a witness. We think that in an equity case like the one at bar, all testimony that will shed any light on a pretended invention, in which the public is so greatly interested as in this barbed wire business, ought to be produced.

George R. Beers testified: "Am a farmer, age 47; live "in Royston, De Kalb county, Ill; I knew Isaac L. Elwood; "have been farming twenty-five years; have lived in De Kalb "county since 1855; I first saw barbed wire for fence about "the year 1857, on my father's farm in the town of Mayfield, "in said De Kalb county; I then lived with my father; the "wire I saw in 1857 was a single wire with barbs on it; it "formed part of the fence around the hay stack on the east "side of the barn; the main wire, I should think, was number "9 or 10; the barb was a smaller wire; the barbs were proba- "bly six inches apart; the barbs were cut sharp or beveled; they "were twisted around the main wire and made fast to it; they "were twisted around once, then extended along the main "wire probably half an inch or an inch, then twisted again in "the same way, with the points standing in the opposite direc- "tion, the points being half an inch or an inch long; they were "not even or regular, as to that; can't say the length of it; "was placed there to keep the stock from the hay stack; my "brother, E. A. Beers, barbed that wire and put it there; I "afterwards saw another and different wire that formed part "of the fence between the yard and hay stack; it was on a "board fence, between the top and second board, composed "of two wires smaller than the first one named, the barbs be- "ing fastened to one similar to the first and then twisted to- "gether; I mean the main wires twisted together; this was in

"December, 1859; during the summer of 1859 I was in Cali-
"fornia; I came back in December and I saw that wire short-
"ly after I came back, working about the premises; this twist-
"ed barbed wire was extended along several panels; I think
"the barbs were about the same as those on the single wire I
"have described; I know what is now known as the Glidden
"twisted barbed wire, now manufactured by one of the com-
"plainants, Isaac L. Elwood, in this De Kalb county; the barb
"on the Glidden wire was made a little more compact and a
"little more uniform in regard to length; otherwise it is about
"the same as the twisted barbed wire that I saw on my
"father's farm in 1859; Joseph F. Glidden, of De Kalb coun-
"ty, is reputed to be the patentee of the wire now being man-
"ufactured by Isaac L. Elwood; I have known this Mr. Glid-
"den 15 or 20 years; I suppose he has lived here a great
"many years; during the time I have known him, he has lived
"about 10 miles from my father's farm; it was quite general-
"ly known in the neighborhood that father's farm had this
"barbed wire on it; my father called these barbs prickers;
"there were different pieces of this barbed wire placed in
"gaps on my father's farm; I have seen my brother barbing
"some of it, seen him and Wesley Ottman working at it;
"they had a small pair of pincers, a vise, an old ax and a cold
"chisel they used about barbing the wires; cut the barbs
"slanting with a cold chisel; for twisting the wires my broth-
"er had an arrangement fixed to the grindstone, on the oppo-
"site side from the handle; it was an attachment for a treadle;
"the two wires were attached there and by turning the crank
"it twisted them together; I never saw them twist it; I saw
"the arrangement and he explained how he did it; there was
"a stick about two feet long fastened on the shank of the
"treadle, and the wires were attached to the ends of this; I
"do not know where any of this barbed wire is now; My
"brother, E. A. Beers and Mr. Ottman, a neighbor, were exper-
"imenting with wire, and always have been; I do not know

"where my brother, E. A. Beers, now is." (Record 901 to 904).

On cross examination he testified "I have not seen or "heard of my brother in a long time; I had a gray horse that "caught his leg and tail in this barb wire at the stock yard; "I saw a piece of barbed wire north of stock well on the "east fence of pasture; twisted wire." (Cross Int. 49. Record 909). "I know some of the barbs were made from a kind "of wire we used to ring pigs with; I heard my brother, E. A. "Beers, ask him (father), to get him some wire; I think my "brother, E. A. Beers, is four years younger than I am." (Record 904–913).

Stephen L. Nichols testified: "Am a farmer; reside in "Mayfield township, DeKalb Co., Illinois; lived there all my "lifetime: farm and stock worth $10,000; I knew Charles "Beers, of Mayfield township; lived about 2½ miles from "him; I knew his sons, Geo. R. Beers and Edwin A. Beers; "knew them for 30 years; they used to make their home with "their father; I was acquainted with the Chas. Beers' farm; "I saw a twisted barbed wire on that farm in 1860; that was "the first I saw; it was on the east side of the road, and on "east side of the cow yard; it was put there to prevent the "cattle from breaking through the fence; it was between the "two top rails, and formed a part of the cow yard fence; "there were two wires twisted around and another piece of "wire, I judge six inches in length, twisted around this wire, "one end projected one way the other end the other way; "were twisted twice around and projected about an inch; "these coils twisted around were about 10 inches apart, that "is the barbs were; each barb occupied about 4 inches on the "wire. The circumstance that makes me remember it is, I "went there to pay a note to George Beers; he was not at "home; I went down to the yard where his father, Charles "Beers was, and in getting over the fence I tore my overalls; "I asked Mr. Beers what kind of a fence he had: he says it

"is what Ed. built and put there to keep the cattle from break-
"ing through; I then looked at the wire and saw how it was
"made; then paid him the money for George; that was about
"the middle of November, 1860; it was this barbed wire that
"tore my overalls; it was different from what they have now
"a days; I should think this strip of barbed wire was about
"four rods long; I paid the balance of the note in the fall of
"1861; I know Joseph F. Glidden, now in DeKalb, patentee
"of a barbed wire, manufactured by Isaac L. Ellwood; I have
"known him about 35 years; during that time he lived in
"DeKalb County, Illinois, and between 7 and 8 miles from
"this Beers' farm." (Record 913).

Horatio A. Mason testified: "Age 57; farmer; live in
"Sycamore, Illinois; my farm is worth about $50,000; have
"lived in DeKalb County 34 years; I knew Charles Beers, of
"Mayfield township, from 1856 to his death in 1877; I lived
"some 6 or 7 miles from him; I saw barbed wire forming
"part of a fence on that Chas. Beers' farm, in November or
"December, 1857; it was a single wire, with what we call
"barbs now, twisted around the wire, a foot or two apart, and
"half an inch to an inch long, sharp points; it was on one or
"two panels of fence, 12 to 15 feet, and was around a straw
"or hay stack; in March 1862 I saw barbed wire again on
"that Beers' farm; I was there to collect a couple of notes of
"Charles Beers, at the farm; what I saw that time was a
"twisted wire on a post and rail fence, about 2 or 3 rods long;
"barbs twisted around the two wires; these barbs were about
"a foot apart, and made of small wire; it formed a part of a
"barn yard fence, where they kept cows and cattle; Charles
"Beers said that twisted wire was something the boys got up;
"my attention to this single wire having sharp barbs on, in
"1857, was in getting over the fence I caught my hand on a
"barb; in October, 1877, on Sunday, I saw a single wire
"again on the side of an orchard on the Beers' farm, on two
"or three panels of fence; Joseph F. Glidden I have known

"about 34 years; he lived 8 or 10 miles from this Beers' "farm." (Record 920).

Mason McClellan testified: "Age 60; farmer; live in "Mayfield township, DeKalb County, Illinois; lived there 39 "years; I knew Charles Beers well for 20 or 22 years; I lived "not quite a mile from him; I saw a fence with barbed wire "on the Chas. Beers' farm, in the fall of 1857; it was a sin- "gle wire; can't tell how long it was; it was on a cow yard "or stock yard fence; might have been 3 or 4 rods long; the "barbs, as near as I can remember, was two or three inches "apart; the barb was sharp point; it was made of wire and "wrapped around the single wire; within three or four years "after that I saw other barbed wire on that farm on a piece "of fence near the stock well; that was a twisted wire; the "barb on it was similar to what was on the single wire; I "undertook to crawl under this wire at the stock well and it "caught in my clothes and tore them some; I saw another "piece of single barbed wire on the Beers' farm, right west "of the orchard, in August 1877,—the time the old gentle- "man lay sick; I was then taking care of him; I saw a piece "of this twisted barbed wire, or similar to that at the well, on "the Beers' farm; it was at a sale in September 1877; in "picking up some old iron out of a box to sell, come across "this wire in the box." (Record 925).

John B. Aurner testified: "Am 67 years old; reside in "DeKalb County, Illinois; have lived in this county 47 years; "I was well acquainted with Charles Beers, of Mayfield town- "ship; I saw barbed wire on his farm in the fall of 1857; I "saw a string of barbed wire nailed on top of the fence to "keep the colts from reaching over to the hay stack; one end "was nailed to the barn; don't know what the other end was "nailed to; it was on Mr. Beers' farm; the colts were in the "barn yard; it was around the hay stack; the barb was cut "with a cold chisel; about 2½ inches long; it was held by "some instrument at one end, and twisted around the

"wire, and part of it was twisted twice around; I "don't know if all of it was; I should think that piece of wire "that had barbs on, that I examined, was 35 feet long; I saw "several barbs; got my hand on two of them before I noticed "them; I noticed them along the wire; I went to put a sheep "over the fence and caught my hand on the sharp point right "under there, (pointing); the Beers boys were there; they "showed me how they cut these barbs off from the wire with "a cold chisel and a hammer; they told me they held the "barbs at one end with pinchers and wound them around; "they had a vise there; the old man called it the boys' sharp "fence, and told me to look out; at that time I was running a "large farm." (Record 932).

Defendants had no sample of the Beers barbed twisted wire to introduce in evidence, but the complainants relieved us from the dilemma by putting in evidence a piece of it as their exhibit, and identified the same by their witness, viz., Edmund Adcock who testified: "Am a lawyer in Chica- "go, of the firm of Munday, Everetts & Adcock; in 1879 I "was a Notary Public in Chicago; I became acquainted with "one Edwin A. Beers, then of DeKalb, Illinois, at a time he "was examined as a witness before me as a Notary Public, "in case of Washburn & Moen M'f'g. Co. and I. L. Elwood, "against E. A. Beers; I have just looked at the model, now "shown me, marked 'Complainants' Exhibit Beers' Alleged "1859 Barbed Fence Wire;' I first saw it in 1879, at the time "of the taking of Mr. Beers' deposition, in the suit before "referred to, or shortly before, at my office, in Chicago; the "tag on it bearing my signature, was written by me, and is "the identification tag; I recollect that the model was pro- "duced by Mr. Beers, testified to by him, and offered in evi- "dence before me, and marked by me; he testified that he "made about 3 rods of the barbed wire shown in the exhibit; "that he placed it on the cow yard fence in 1859, and remov- "ed it afterwards to the stock well fence, and that the piece "shown in the exhibit was cut off from it at the time of re-

"moval; that this was at his father's farm; he said he kept "this short piece which he cut off, in a box of old irons, on "his father's farm until after his father died and the adminis- "trator's sale took place." (Rec 357)

We think this case of prior use is well proven, and the defense to it is too weak to merit much consideration. This not only shows a case of prior use, but it is in Mr. Glidden's neighborhood that it was known some fourteen years before Mr. Glidden pretends to have invented his wire, and Mr. Glidden must have seen it.

We submit this Beers fence in full confidence that it will be held to invalidate the patent sued on herein.

XIII.

For convenience of reference, both as to the former part of this argument and for oral argument,—if any is made,—we here abstract the testimony of complainants' witnesses, Charles F. Washburn, Isaac L. Elwood and A. K. Stiles; that is the direct evidence, in part, and cross examination entire. Also with it the testimony of the defendant, S. Thompson.

Charles F. Washburn, of Worcester, Massachusetts, testified: "I am vice-president and secretary of the Washburn "& Moen Manuf'g Co., complainants; I have been as familiar "as a man well could be with the business of said company; "the manufacture and sale of barbed fence wire is and has been "an important branch of our business since spring of 1876; "its manufacture and sale has come within my department "since that time; the Glidden two-point style of barbed wire "has been the leading style of barbed fence wire we have "manufactured since spring of 1876; Washburn & Moen Man- "ufacturing Co. and I. L. Elwood, of DeKalb, Illinois, owns "the patent No. 157,124, issued to Joseph F. Glidden, Novem- "ber 24, 1874, and the Glidden wire we have manufactured "is under that patent; complainants have jointly owned this pa- "tent since spring of 1876; no other parties or corporations man-

"ufacture a style of barbed fence wire, like this Glidden patent, "than ourselves and Mr. Elwood, this Glidden patent having "been invented by J. F. Glidden, of DeKalb, who soon after "took into company with himself Mr. Elwood, referred to, "and being among the very earliest inventions made in barbed "wire, and being regarded by Mr. Elwood, Mr. Glidden and "this company,—who bought out Mr. Glidden's interest,—as "being of a superior style of barbed fencing, we concluded at "the beginning that whatever styles we thereafter licensed any "other manufacturers to make, we would not, under any cir- "cumstances, license anybody to manufacture this particular "style; notwithstanding this, the two complainants, the Wash- "burn & Moen Manuf'g Co. and I. L. Elwood, have sold of "the Glidden style of barbed wire more than one-third of the "gross amount of barbed wire sold; that is, our two concerns "out of fifty-two concerns and corporations, have sold more "than one-third of all the barbed wire sold during this time. "The corporation complainants have fifty-two licensees; but "one concern has manufactured any under the Kelly patent, "and that concern were licensees of ours, and limited to the "one style known as the Kelly. * * * It is the universal "testimony of those most conversant with barbed wire, that a "needle point which will prick and warn the animal before he "has pressed hard enough against the fencing to do itself in- "jury, is absolutely essential, and it is impossible to put such a "point on a sheet metal barb; we have uniformly used what "may be styled the two wraps in the Glidden wire, because "we preferred putting the barbs on as firmly as possible, and "the more we used the firmer they would be in place. There "have been 340 patents issued specially on barbed wire, since "the issue of the Glidden patents in 1874." (Rec. 775–780.)

Cross examination of Charles F. Washburn: "The cor- "poration complainants was incorporated about 1860; in that "year they manufactured all kinds of iron and steel wire; I "presume Washburn & Moen existed as a firm before that,

"and perhaps as far back as 1850; when the corporation was "organized in 1860, they took up the business of the firm; it "succeeded, and they manufactured iron and steel wire of "every description, and among their specialties we manufac- "tured smooth wire for old-fashioned fencing. The firm of "W. hburn & Moen, if they commenced in 1850, carried on "the b isiness of wire drawing up to the organization of said "company in 1869; we have never in the past or now manu- "factured any of the Glidden wire since 1876, except in Wor- "cester, Massachusetts, and DeKalb, Illinois; they have never, "since 1876, manufactured any but twisted barb wire; twisted "wire has been the style almost wholly manufactured through- "out the country since 1876; the total annual tonnage of "barbed wire which the licensees of the complainants are al- "lowed by their licenses to make, is 173,000 tons; since 1876 "the amount in tons of barbed wire manufactured by com- "plainants, of the Glidden wire, is about 20,000 tons a year. "Jacob Haish, for the last ten years, has manufactured about "3,000 tons a year. The amount of barbed wire manufac- "tured by all the barbed wire factories in the United States, "from 1877 to 1886 inclusive, I approximate the gross tonnage "to be 714,000. It is impossible to put on a Glidden barb "without the barb showing more than one wrap; they have "usually shown three wraps in the manufacture of the Glid- "den wire; it could not be put on without showing two wraps, "either wholly or partly around the strand; the complainants "now own or control the Kelly patent; we obtained the title "from the Thorn Wire Hedge Company, and it got its title "from Mr. Calkins, I think." (Rec. 778–782.)

Isaac L. Elwood testified, direct: "Live in De Kalb, Il- "linois; am a manufacturer of barbed wire; have been in the "business since early in 1874, at De Kalb; I am one of the "complainants; I have read the deposition of Charles F. "Washburn, given in this case, March 15th, 1887, at Worces- "ter, Massachusetts; I have known this Mr. Washburn since

"1875; I was first associated with the corporation complain-
"ants in the manufacture and sale of barbed wire and in the
"ownership of the Glidden patent 157,124, in 1876; the state-
"ment of Mr. Washburn in his deposition in relation to the
"manufacture and sale of barbed wire, the trade, its growth
"and standing, the facts as to the Glidden patent and the re-
"lation of the licensees of said corporation complainants
"to said complainants, are true as therein stated; the
"principal advantage of the Glidden barb over other wires is
"it is wrapped only around one of the main strands; is held
"rigidly in place by the twist of the other main wire, while all
"other wire barbs are wrapped around both of the main wires,
"necessitating more wire for the barb, which increases the
"weight from two to four ounces to the rod; the Glidden barb
"is considered the most simple to manufacture, and that more
"rapidly and with less expensive, complicated machinery; the
"most efficient barb for the reason that, owing to lightness, it
"can be put closer together without materially increasing
"weight, and being held in place by binder wire, it is impossi-
"ble to remove them without cutting off." (Rec. 459–460.)

Cross examination: "Commenced the manufacture of
"barbed wire with Mr. Glidden in winter of 1874; Mr. Haish
"commenced about the same time, with man and horse power;
"I am inclined to think that Jacob Haish did commence to
"manufacture barbed fence wire, and put it onto the market
"in the spring or early summer of 1874: I think the first li-
"cense was issued by complainants in this case, in 1880; I
"don't know the amount of barbed wire manufactured in the
"United States before that; there has been a half a dozen con-
"cerns not licensed by us, who have manufactured in the Unit-
"ed States; don't know how much they made; the business of
"manufacturing barbed wire, in which I was engaged, was
"materially increased by entering into partnership with the
"complainants, Washburn & Moen Manufacturing Company;
"I think it is a fact that the Washburn & Moen Manufacturing

"Company are the wealthiest men and can command the most "money of any men now engaged in the manufacture of barb- "ed wire in the United States, aside from myself; I think they "have the means but not the capacity to manufacture all the "barbed wire needed in the United States, that is, they haven't "the machinery; means gets machinery; give them time "enough and they could raise the money and build machines "enough to manufacture all the barbed wire that is made; I "think the Washburn & Moen Manufacturing Company have "the largest wire drawing establishment in America; I think "there was an organization, usually called a pool, by the li- "censees of complainants formed, I think, in 1875; it was form- "ed for the purpose of a uniform price; the licensees were "not all in; Mr. Billings, of Cleveland, Mr. Haish, a party in "California, and I think two or three more were not in; don't "remember whether Mr. Haish was a licensee then or not; I "think they haven't had any meeting for a year and a half; "the first automatic barbed wire machine that I. L. Elwood & "Company had built cost us about $40,000; at present, you "can get just as good a machine for $200; our barb coiled "twice around is longer than one coiled once around; the dif- "ference in weight per rod of wire with barbs coiled twice "around a No. 12 or 12½ wire would be about an ounce; don't "think it would be over half an ounce with No. 14 wire for "barbs; a hundred pounds of Glidden hog wire will go from "80 to 100 rods; my recollection is that at an early day we "manufactured considerable Glidden wire with the coil but "once around; the first machine we ever used was the Coffee "Mill; by considerable, I meant in experimenting we made no "tons of it; I mean, with the barb coiled only once around; "don't think we did anything more than experiment with it; I "have seen some samples that were sent as the 'Beat 'Em All "Barbed Wire' make, that the barbs were put on alternate "wires." (Record 461–469).

Aaron K. Stiles testified, direct, "Age 53; residence Chi- "cago, and am manufacturer of barbed fence wire. by auto-

"matic machinery; have been engaged in it 12 years, under "the name of the 'Thorn Wire Hedge Company,' and as Stiles "& Calkins; I was president of said company, manufacturers "of the Kelly barbed wire from its first organization until "1884, about nine years; am a member of the firm of Stiles "& Calkins since it was formed; was president of the Barbed "Wire Association and Manufacturers' Equitable Association, "which was an association formed of the most of the licensees "of the Washburn & Moen Manufacturing Company. Have "devoted nearly all my time to the barbed wire interest for the "last 12 years, up to 2 or 3 years ago; I am familiar with the "barbed wire our firm makes; I have watched the progress "of invention in barbed wire, know the different styles made "and have examined a great deal of barbed fence wire as put "up in fields, with a view of ascertaining the best, most effec- "tive and durable wire, being interested in a firm who makes "a business of building barbed wire fences for railroads. I "do not think it possible to coil a wire barb around a smooth "wire by hand or machinery, so that it will retain its position "without indenting or bending the main wire so that it will "not become loose; I think steel wire best for barbed fence; "it is stronger, more durable and makes a sharper and more "lasting barb; the points do not become dull so soon by oxi- "dation. The Thorn Wire Hedge Company, since its organ- "ization 12 years ago, have manufactured what is known as "the Kelly wire, which has a diamond-shaped barb strung up- "on one wire and fastened in place by compression upon the "wire, and another wire twisted along side of it; we have thus "continued to manufacture it, under the Kelly patent No. 74, "379, Feb. 11, 1868, and the re-issued patent of the same, "No. 6,902, Feb. 8, 1876; the company was licensed by the "Washburn & Moen Manufacturing Company and I. L. El- "wood, in December, 1878, under the Glidden patents; since "that time we have constructed different machines, and manu- "facture wire, using the same barb, but without compressing "or fastening the barb on the wire, simply holding the barb in

"place by the second wire, which serves as a binder wire to "keep the barb from turning around on the main wire. The "said company has never manufactured any other kind of wire "since its organization; no other company has ever manufac- "tured this kind of wire, to my knowledge; by their license, "they have been confined to this kind of wire; it has not, in "the last 12 years, been limited, in any license, as to its annual "production of barbed wire; the Glidden 157,124 was one of "the patents we were licensed under; it would be impossible "to tell the consideration the Thorn Wire Hedge Company "paid for their license or permission under the Glidden pa- "tents, in December, 1878, as, in consideration of the license "or agreement, we reduced the royalty to be paid to us by "the Washburn & Moen Manufacturing Company and I. L. "Elwood, from 37½ to 25 cents per 100 pounds upon the wire "they should make, or license others to make; Stiles & Cal- "kins manufactured their barbed fence wire in the main build- "ing, with the Thorn Wire Hedge Company, but in a differ- "ent room, and it is a four point wire double strand; this wire "we manufacture under a license from complainants, and their "tonnage per annum is 2,000 tons, dated July, 1881; we had "a claim unsettled against the Washburn & Moen Manufac "turing Company, and we settled for $10,000 cash and this "license referred to. The second, or binder wire, on the Kel- "ly barb, does not prevent the barb from turning around, does "not bind the barb firmly, until the wire has been stretched, "which is done when the wire has been put upon the fence; "said company made about 3,000 tons in 1883." (Record 401–407).

Cross examination: "Our company became the owner "of the Kelly patent in 1874; I think at the time of the agree- "ment between Washburn & Moen Manuf'g Co. and the "Thorn Wire Hedge Co., in 1878, we believed the Kelly pat- "ent re-issue, No. 6902, to be valid; from 1878 to 1884, I "should estimate, at a rough guess, that the number of tons of

"barbed wire manufactured by Washburn & Moen Manuf'g "Co. and I. L. Elwood and their licensees, to amount to 185,- "000 tons; it appears to me when we sold the Kelly patent to "the Washburn & Moen Manuf'g Co. we received a license "under the Kelly patent; I understand that since that pur- "chase, said company has the right to license the manufacture "of the Kelly wire; the price of the Kelly wire has been from "25 to 50 cents higher in the market than any other, except "the Glidden wire, and has sold about the same as it; it cost "us some 75 cents to a dollar a hundred to make the Kelly "wire, up to the time I went out; they got up some improved "machinery then, and expected to make it cheaper; it is not "uncommon to find men who think the Kelly wire better than "the Glidden. For certain reasons the sum to be paid by the "Washburn & Moen Manuf'g Co. and I. L. Elwood and their "licensees, has been reduced to five cents a hundred pounds, "and this too, for the purpose of sustaining the general busi- "ness. The contract made between the Thorn Wire Hedge "Co. and the Washburn & Moen Manuf'g Co., in July, 1876, "at the time the Kelly patents were assigned to the Wash- "burn & Moen Manuf'g Co., provided that said company "should pay a royalty to the Thorn Wire Hedge Co. upon all the "barb wire which it should manufacture or license others to "manufacture, and receive pay therefor; and they were to use "due diligence in manufacturing barbed fence wire, and to "supply the demand; and they did pay the royalty to said "Thorn Wire Hedge Co. regularly every month, from the "date of the contract to the expiration of the Kelly patent; "what they claimed was the full amount of royalty on all the "barbed wire manufactured by them, or licensed by them, for "which they received royalty from the licensees, neither of "the complainants, to my knowledge, ever manufactured the "Kelly wire. For the last two years there has been of the "Kelly wire about 3,000 tons a year." (Rec. 407–413.)

Salmon Thompson testified, direct: "I am one of the "defendants in this case; live at Waterloo, Iowa; I have with-

"in the last four or five years, acquainted myself with the con-
"dition of the trade in barbed wire through Illinois and Iowa;
"have traveled over the country some, selling wire; I should
"think the Glidden wire to be from one-sixth to one-eighth of
"the whole barbed wire manufactured and sold; I know from
"report that Jacob Haish was the first to manufacture
"barbed wire by machinery, and put the same on the market;
"I have been informed of the existence of a pool which the
"complainants have gotten up with their licensees, having for
"its object the keeping up of the price of barbed wire; Jacob
"Haish is said to be the president of it; I have examined the
"piece of barbed wire handed me, and it is the Haish Barbed
"Wire." (It is here offered in evidence, and so marked.) "I
"know what is known in the market as the Kelly barbed wire;
"I now have a piece in my hands, manufactured by the Thorn
"Wire Hedge Co." (The piece is now offered in evidence,
and marked the "Kelly Barbed Wire Exhibit.") "I have a
"piece of the Glidden wire, manufactured by complainant, Mr.
"Elwood." (This piece is now offered in evidence, and marked
the "Glidden Barbed Wire Exhibit.") "I have with me a piece
"or specimen of the Beat 'Em All barbed wire, manufactured
"by the defendants;" (which being identified by the witness
is offered in evidence and marked "The Beat 'Em All Barbed
Wire Exhibit.") "There is a difference in the style and
"mechanism, and cost of manufacture between the Beat 'Em
"All barbed wire and the Glidden; both of the main wires
"are barbed in the Beat 'Em All barbed wire at the same time,
"and then are twisted together, so that the barbs come alter-
"nately upon each wire, causing the wire to twist over and
"leave both the same length; the barbs are both put on at the
"same revolution of the machine, and does not require to go
"only one-half so far to put the barbs on, which makes it
"wholly one-half cheaper to manufacture; the material used
"for the barb is fully five-eights of an inch shorter than in the
"Glidden barb, which is caused by wrapping the barb only
"once around the wire; that five-eighths of an inch gives

"about ten rods of finished wire extra, in every one hundred "pounds, allowing the barbs to be 2½ inches apart on both "wires; in other words, the Beat 'Em All barbed wire will "reach 95 rods to the hundred pounds, while the Glidden "wire will reach about 80 rods to the hundred pounds." (Re- "cord 935–938).

Cross examination: "I settled upon this Beat 'Em All "style of barbed wire for the defendants to manufacture, be- "cause it is much easier to manufacture and will give the con- "sumer more fence for the money, and is just as effective and "stronger and just as durable as any wire on the market; we "manufactured this wire on a small scale, by spells, for 5 or 6 "months, before the beginning of this suit, and sold it to the "trade; we did not expect to be sued, as the Hunt, Smith and "Kelly patents had expired; the reason why the Beat 'Em "All barbed wire is stronger than the Glidden is that each of "our wires are fed through feed rolls alike and each barbed, "and each held by same pressure and the stretch of each ta- "ken out, and both wires come out the same length, while the "Glidden wire has but one strand run through feed rolls and "barbed; the stretch is taken out of that, but the other wire "is not run through feed rolls and is not stretched, and the re- "sult is the one barbed is the most stretched and comes out "longer than the unbarbed wire, and when used, the strain "comes on the wire stretched the most, causing it to break "frequently; the Glidden wire that has the barb on is the "tautest." (Record 939-951).

Salmon Thompson re-called and testified: "I have had "considerable experience in inventing, getting up models and "making automatic machines for making barbed wire fencing; "have worked at it 8 or 10 years; I constructed machines for "putting wire barbs on wire; also sheet metal barbs, and "spacing machines for spacing sheet metal barbs, and dies and "presses for cutting them and stringing these barbs on the "wire; I have already constructed machinery that will cut,

"punch and string the barbs onto the end of the main wire, "all being done at the same time, at the rate of three to five "hundred barbs a minute, owing to the speed at which the "machine is running; the barbs are cut out of a strip of "metal, wide enough for the purpose, which strip is rolled "out of a No. 10 wire, rolled flat; the strip as it is fed into "the press is punched, one barb ahead of where the die cuts "the barb off; that die presses the barb—that has been cut "off—down into a block that has a space in it that just fits the "barb; the end of the main wire is held up into the space by "means of plants, so the point of it comes just right to enter "the hole punched out of the barb; the barbs are pressed "into the block until they are a mass about ¾ of an inch "thick, when they are passed along on main wire, and when "enough are strung on this wire they are wound with the "bundle and taken to the spacing machine and run through "by a continuous motion; this spacer spaces the barbs any "required distance apart, and as it passes through the machine "it is run onto a spool in a twister and twisted and finished "ready for market; I have such a machine in Manchester "now; no needles are now needed for the manufacture of "sheet metal barbs, by me; I just sharpen the main wire and "use that to catch the barbs; the barbs are driven from the "press onto the main wire; I can manufacture this kind of "barbed wire by this kind of automatic machinery six times "as fast as the Glidden wire is now manufactured; it is no "trouble to put on 600 barbs a minute with the spacing ma-"chines; and the expense to make it can't be more than one-"half that of the Glidden; it is no more difficult to make the "Kelly barbed wire than what I have just described, and with "same kind of machines; it would be easier to make than "ours, because we have to bend the point of the barb of ours "in a circle, while the two ends of the Kelly are alike, and it "is an easier barb to cut than ours; I have a piece of our "wire here, made with our machines, which I now produce." (The piece is here offered in evidence and marked "The

"Thompson & Farrell Barbed Wire Exhibit"). "The loss "of the punching in the Kelly barb, which with the barb "would not weigh over half as much as the Glidden barb, "taking not more than half the metal that it does for the "Glidden; it takes of mine about 380 to make a pound and "about 200 Glidden barbs to a pound; it is improvement in "machinery that makes the manufacturing of barbed wire "easy; there are many styles of wire easier to make than the "Glidden, and with less expensive machines; it would take a "different constructed machine to make the Glidden barb, as "shown by his patent, than any now in use; all of the Glid "den wire I have seen has a sharp point on the barb, and none "like that in the drawing; barb wire without sharp points— "such as is shown in the Glidden drawings—could not be "sold in the market for any more than plain wire; capital has "everything to do with bringing any particular style of barb- "ed wire to the front; that and threats together; so far as I "know, it takes more money to run the barb wire business "than any other; it costs from $1,000 to $1,800 per car load— "according to kind and quality—for raw material; Mr. El- "wood, I understand, makes from 3 to 5 car loads a day, us- "ually; I can cut barbs from sheet strips just as sharp as can "be cut from wire." (Record 1580-1589).

XIV.

INFRINGEMENT.

We do not think it possible for the Court to ever reach the question of infringement in this case, for the reason some if not all the points made before this are good, and the Glidden patent sued on must be decreed void. Nevertheless, it is our duty to present this question.

It must be remembered that the Glidden patent sued on is only a combination patent, no new element in it that Mr. Glidden can claim to be the inventor of, unless it is the twisting key, which he nor any one else ever used. That key was abandoned when the first commercial wire was made. The

combination, as shown by his patent, is a strand of wire with blunt spurs coiled at their middle around it for the barb, another wire for a binder laid alongside this barbed one, and the two twisted together with his key; in other words, the elements are, blunt spur wires, all on one wire strand, a binder wire unbarbed, a twister key with which both wires are twisted together, see drawings, (Record 1940). The following elements were not new to Glidden. Wire for fences had been used for years. The wire barb was shown in the Lucien B. Smith patent of June 1867, (Record 2004). The coil in the wire is shown in numerous articles in everyday use for years, such as the bails of dinner pails, also shown in L. Levenworth's patent, October 1849, (Record 1991), in which figure one shows a series of coils in a strand of wire, and if cut between each coil square across would make a complete Glidden barb, and if put in place of the Kelly barb would make a complete Glidden wire. Also shown in the Patterson patent, of July 1868, (Record 1994), the Hawley patent lightning rod Feb. 1866, (Record 2007) and Glidden's admission that he is not the inventor of the barb. The twisted wire is shown in the Kelly patent, Feb. 1868, (Record 2000). The key itself is an old device, used for winding clocks, etc; therefore, the only thing Glidden could claim anything for, would be the combination which we have shown was not patentable, because it produced no new result from these old elements.

Defendants' wire is two strands of fence wire, each barbed with a wire bent at its middle around the strand, each barb sharp and the two barbed wires laid together so the barbs come alternately, and then twisted together, forming the completed wire. It is a different combination from the Glidden, in this: it has two barbed wires instead of one, no unbarbed binder wire, a sharp barb, coiled only once around, and no twisting key. It has less elements in its combination and different ones. There are three elements in the Glidden combination, wanting in defendants', viz., a blunt spur wire, an un-

barbed binder wire and a twisting key. The use of one less than the whole is not an infringement. Gould vs. Reese, 15 Wall. 187.

If, therefore, the Glidden patent should be held valid, then there is no infringement and the complainants are not entitled to a decree.

We conclude, therefore, that there was no error in the judgment and decree of the Circuit Court, and the decree therein should be affirmed.

For convenience of reference, on the various questions of law heretofore presented in this argument, we annex hereto a brief of our authorities:

LAW BRIEF.

On Question of Prior Use.

In Bradford vs. Hunt, 1 Mason 302, Justice Story says: "I hold it to be the true interpretation of the statute, that any "patent may be defeated by showing that the thing secured "by the patent had been discovered and put in actual use "prior to the discovery by the patentee, however limited the "use or knowledge of the prior discovery may have been."

And in case of Coffin vs. Ogden, Whitman's P. C. 465, the Court says: "Prior knowledge by a single person is sufficient; the number is immaterial," and cites the case, Bradford vs. Hunt.

In Miller & Morley vs. Foley & Co., 9 Fed. Rep., 603. the same doctrine is held. A single use by one Smith, who practiced the thing invented in a very limited way, in a remote town in Kansas, and that only on a very few plugs of tobacco, The Court in that case says: "Smith discovered the process; "* * * having applied it to one or two plugs, it required no "inventive genius to apply it to others." On the same line are the following authorities:

Coffin vs. Ogden, 18 Wall. 120.
Gaylord vs Wilder, 10 How. 477.
Reed vs. Cutter 1 Story 590.
Blake vs City of San Francisco, 5, S. C. R. 692.
Brown vs Piper 91 U. S. 37.
Mahan vs Howard 5 S C. R. 174.
Roberts vs. Ryer 91 U. S 150.
Sewell vs. Jones 91 U. S. 180.
Jones vs Barker 11 Fed. Rep. 597.

These cases show that the Courts hold, in every instance, that, where prior use is proven, it is a meritorious defense, and defeats a patent. In this case, we have successfully proven five cases of prior use, and one, the last, in the neighborhood of J. F. Glidden.

STATE OF THE ART.

Want of Novelty.

To be new in the sense of the Art, it must be the product of original thought or inventive skill, and not a mere form of mechanical change of what was old and well known.

The Stanley Works vs Seargent & Co 8 Blatch 341

No invention in giving a new use to an old device.

Woodman vs. Stimson, 3 Fish 104.
Stimson vs. Woodman, 10 Wall 117.
Hotchkiss vs Greenwood, 11 How. 248.
Curtis on Patents, Sec 33 and Note.

ON COMBINATION.

A combination of old elements, such as here found, into a new article, without producing any new result or mode of operation, not patentable.

Pickering vs McCullough, 104 U. S. 318
Florsheim vs Schilling, 137 U. S 77.
Hailes vs. Warner, 353
Johnson Co vs Pacific Rolling Mill Co 47 Fed Rep. 586, and cases cited

ON INFRINGEMENT.

A use of one less than the whole not an infringement.

Barrett vs. Hall, 1 Mason 447
Sawen vs. Neemer, 18 Fed Rep. 40.
Gould vs Reese, 15 Wall. 187.
Rowell vs. Lindsay, 6 Fed Rep. 290.

Defendants did not use the twisting key, nor the binder wire, nor the blunt spur.

Drawings as well as specifications are to be looked to in "giving constructions to claim for a patent, in determining "what was the invention of the patentee."

Swift vs. Whisen, 2 Bond 115.

What the drawings show in Glidden's patent is a blunt barb, and a key.

An inventor can claim nothing more than is shown in his specifications and drawings.

Many vs Jagger, 1 Blatch. 372.

It must be for something described in the specification, so that a person of ordinary skill could make it.

Volger vs. Semple, 7 Bliss 382.

And what an inventor does not claim he is presumed to have abandoned.

Conkling vs. Stafford, 5 O. G. 335.
Evarts vs. Ford, 5 O. G. 58.

A person of ordinary skill looking at the drawings and specifications of the Glidden patent, 157,124, would make a blunt barbed wire, and twist the two wires together with a key at each panel.

UTILITY.

It must be useful. A blunt barbed wire cannot be more useful than a smooth one as it is not effective. It must be "capable of being beneficially used for the purpose for which "it was designed."

Seymour vs. Osborne, 11 Wallace 516.
Many vs Jagger, 1 Blatch. 372.

Glidden's pretended invention produced no new result, and tested by this rule there was no invention in it. See,

Clark, Pomace, Holder Co., vs. Ferguson, 17 Fed. Rep. 79.
Ransom vs. Mayor of New York, 1 Fish , 252.
Perry vs. Co-Operative Co., 12 Fed. Rep. 436.
Hotchkiss vs. Greenwood, 11 How , 248.
O'Reiley vs. Morse, 15 How , 62.
Wilson vs Beecher, 2 Blatch., 132.

The result of Glidden's pretended invention was only barb wire for fencing. Hunt, Smith and Kelly produced the same result.

Glidden only used a mechanical equivalent for the barb and the fastening of it. The use of an equivalent for an old device is not patentable.

Gill vs Wells, 22 Wall 132.
Totham, vs LeRoy, 2 Blatchford 474.

A good definition of what is meant by mechanical equivalent is found in

Carter vs Baker, 4 Fish. 409
Losch vs. Hayne, 1 Webster 205.
Hayne & Howe vs. Abbott, 2 Story 190.

The aggregation of things, old and known, into a new combination is not patentable.

Swift vs Whisen, 3 Fish. 357
Winans vs. Dunmead. 15 How., 341.

In order to be patentable, the *principle* of a device must be new. Principle and form must not be confounded. This distinction is nicely stated in

Treadwell vs. Bladen, 4 Wash, 706.

There is nothing new in principle, no new result and no new combination in this pretended Glidden patent over what was known before.

Complainants' counsel, by their application of the law of combinations, admit that defendants' wire does not infringe any patent on barbed wire now in existence.

We think that the decree of the Circuit Court should be affirmed.

All of which is respectfully submitted,

A. S. BLAIR,
Of Counsel for Defts.

BEAT 'EM ALL BARB WIRE CO.,
S. THOMPSON, W. E. FARRELL,
W. W. NORWOOD, AND J. D. AND
D. WILBER.

BLAIR, DUNHAM & NORRIS, Att'ys for said Defendants.

INDEX OF SUBJECTS.

	DIV.	ARG.	REC.
Statement of the Issues		I.–II.	
" Case		1 – 2	
State of the Art	I.	2 – 8	
Glidden's Idea	II.	8 – 9	
" Disclaimer on the Barb, Nov. patent		8 – 8¼	1969
" " May patent		8 – 8½	1997
" File Wrapper and Contents		– 8¼	1969
" Deposition in Interference Case		– 8½	1980
A Combination Patent	III.	9 – 15	
Use of Binder Wire	IV.	15 – 17	
Want of Originality	V.	17 – 18	
Utility of Glidden Wire	VI.	18 – 25	
Extent of Use of Glidden Wire	VII.	25 – 28	
Effectiveness of " " "	VIII.	28 – 29	
On Simplicity of " "	IX.	29 – 39	
Expense to Consumer of Glidden Wire	X.	39 – 41	
Attack on Kelly Wire	XI.	41 – 47	
Prior Use—Defendants' Witnesses on			
Delhi Fair Fence		48 – 61	
D. S. Potter		49 – 50	1223
H. L. Bates		50 – 51	1321
Joel Bailey		51 – 52	1151
T. W. Robinson		– 52	1061
Geo. A. Underwood		– 52	1961
J. H. Burrington		52 – 53	1175
John H. Peters		– 53	1212
John Dubois		53 – 54	1498
N. Ruggles		– 54	1275
A. Shelden		54 – 55	1264
David Conner		– 55	1169
Aaron Sullivan		55 – 56	1161
Oscar Wellman		– 56	1133
Enos Hamblin		– 56	1124
E. Healy		– 56	1088
N. S. Hale		– 57	1090
Newman S. Preston		57 – 58	1278
Jonathan Lukenbill		– 58	1445
A. A. Strong		– 58	1384
P. McMeel		58 – 59	804
Rollin Lewis		– 59	1460
H. C. Spangler		– 59	1416
S. S. Squires		– 60	1472
James Clugston		– 60	1393
Salem Turner		– 60	1518
Morley Farm Fences—Defendants' Witnesses.			
Benj. Shelden		61 – 62	1251
H. L. Bates		50–51 – 62	1327
Newman S. Preston		57 – 62	1280
A. Shelden		62 – 63	1268
J. B. Satterlee		– 63	1423
Ichobald McDonald		63 – 64	1486
Vernon Burrington		– 64	1406
Chas. Towner		64 – 65	1430
P. S. French		– 65	1438
John Lillibridge		65 – 66	1478
Jonathan Lukenbill		54 – 66	1445
John Dubois		54 – 66	1498
A. R. Loomis		– 66	1489
H. C. Spangler		59 – 66	1416
Stephen J. Edmunds		66 – 67	1441

D. I Johnston	67	– 68	1372
M. Eldredge	68	– 69	1555
S R. Young		– 69	1553
Hutchinson Fence—Defendants' Witnesses.			
Joseph Hutchinson		– 74	1594
Crawford Hutchinson		– 75	1667
Henry Hutchinson	76	– 77	1551
Elizabeth Hutchinson		– 77	1447
J. J. Cleveland		– 77	1661
P. H Warner		– 78	1600
" plat			2016
Salem Turner	78	– 79	1625
Chas N. Turner		– 79	1617
Mrs Minnie Young		– 80	1773
S. R. Young		– 80	1702
D. F. Young		– 80	1609
Henry Quitmire	80	– 81	1788
L. W. Quitmire		– 81	1828
S. R. Young, re-called		– 81	1820
The Long Fence—Defendants' Witnesses.			
W. H. Long	83	– 85	809
A. D. Long	85	– 86	850
Albert Billings		– 86	1866
Geo. P. Blaisdell	86	– 87	883
Ezra Coats		– 87	1010
Joseph Long		– 87	1019
Chas. A. Billings	87	– 88	1596
L. Webb		– 88	1869
" re-called		– 88	1597
T. N. Sedgwick		– 88	1359
James Clugston		– 88	1395
Joseph H. Long, recalled		– 89	1079
George Long		– 89	998
Harrison Wilson		– 89	1533
Nathan Scofield		– 90	1509
The Beers Fence—Defendants' Witnesses.			
George R. Beers	92	– 94	901
Stephen L. Nichols	94	– 95	913
Horatio A. Mason		– 95	920
Mason McClellan		– 96	925
John B. Aurner	96	– 97	932
Edmund Adcock, for Comp		– 97	357
Complainants' Witnesses, &c.			
Chas. F. Washburn	98	– 99	775
" " cross examination	99	–100	778
Isaac L. Elwood	100	–102	461
Aaron K. Stiles	102	–104	401
Salmon Thompson	105	–107	935
" " recalled	107	–109	1580
Infringement ..... XIV.	109	–111	
Brief of Authorities	111	–115	